Planning Commission Study Session Agenda

November 26, 2018

Commission Members

David Culbertson

Joe Foley

Bill Mansfield

David McFadden

Mark McKechnie

E. J. McManus

Patrick Miranda

Alex Poythress

Jared Pulver

Planning Commission study sessions are held on the second and fourth Mondays of every month

Study Sessions begin at noon

City of Medford

Lausmann Annex Room 151

200 S. Ivy Street, First Floor

Medford, OR 97501

541-774-2380

Planning Commission

Agenda

Study Session

November 26, 2018
Noon

Lausmann Annex, Room 151
200 South Ivy Street, Medford, Oregon

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10. Introductions

20. Discussion items

20.1 **CP-17-117 / DCA-17-118** 2016 Local Wetland Inventory (LWI) & Wetland Regulations

30. Adjournment

Meeting locations are generally accessible to persons with disabilities. To request interpreters for hearing impaired or other accommodations for persons with disabilities, please contact the ADA Coordinator at (541) 774-2074 or ada@cityofmedford.org at least three business days prior to the meeting to ensure availability. For TTY, dial 711 or (800) 735-1232.

MEMORANDUM

Subject	2016 Local Wetland Inventory (LWI) & Wetland Regulations
File no.	CP-17-117 & DCA-17-118
To	Planning Commission
From	Carla Angeli Paladino CFM, Principal Planner
Date	November 13, 2018 *for 11/26/2018 Study Session*

COMMISSION DIRECTION

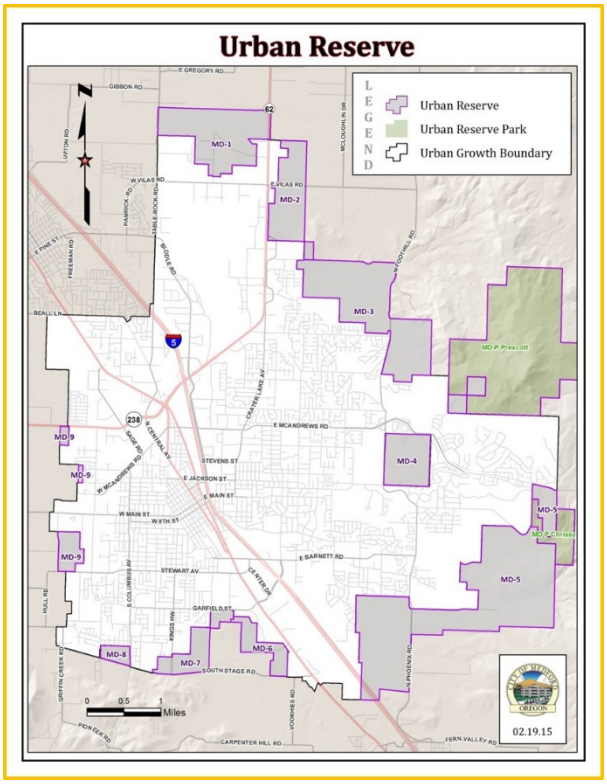
Staff is providing the Planning Commission with the latest update and code changes related to wetland regulations prior to the scheduled hearing on November 29th. The City proposes to adopt by reference the 2016 Local Wetland Inventory conducted for the Urban Reserve properties, summarize the findings in the Environmental Element of the Comprehensive Plan, and amend Chapter 10 of the Municipal Code to more clearly define regulations related to wetlands. This is one of the supplemental tasks to complete in order to annex and develop land in the City's Urban Growth Boundary expansion areas. Staff is seeking general comments and concerns from the Commission regarding the proposal.

OVERVIEW

In 2015, the City hired SWCA Environmental Consultants to conduct a Local Wetland Inventory (LWI) for the land located in the City's entire Urban Reserve area (approximately 6,400 acres).

A Local Wetland Inventory is a comprehensive survey of a geographic area. In this case, the entire Urban Reserve was studied, to identify, characterize, and locate the approximate boundaries of wetlands and other waterways. The information gathered is a resource tool that provides property owners, future property owners, and local jurisdictions with data to help inform future decisions on a property. The inventory is a preliminary assessment to help describe the function

and relevance of the wetlands identified (significant wetlands versus other wetlands). An informational meeting about the project was held on March 18, 2015. Notices of the meeting were mailed to 210 property owners. Fourteen people attended the meeting which kicked-off the project and informed the public about the field work to be conducted. The consultants conducted field work at the end of March and April. The preliminary findings were presented to the public at a second informational meeting held on July 1, 2015. The same number of notices were mailed and the same number of people attended the meeting. The consultants drafted the inventory by October 2015 and submitted the findings to the Department of State Lands (DSL) in November.



The City received a letter from the Department of State Lands approving the Local Wetland Inventory and Assessment for the Urban Reserve in January 2017. The LWI can be found at the following link: https://docs.dsl.state.or.us/PublicReview/ElectronicFile.aspx?docid=3117200&&dbid=0

To date, the Planning Commission has held three study sessions on this topic beginning in November 2015, May 2016, and August 2016. The City Council has held one study session on September 13, 2018. Currently, staff has drafted development code language to regulate wetlands citywide, amended the Environmental Element of the Comprehensive plan summarizing the 2016 LWI for the Urban Reserve and incorporating it by reference, and conducted an ESEE (Economic, Social, Environmental and Energy) analysis to accompany the Comprehensive Plan information.

In July 2018, a letter was mailed to nearly 300 property owners letting them know that the City will be considering amendments to the Comprehensive Plan and Land Development Code related to wetlands. The letter invited property owners to participate in a wetland stakeholder group to review and comment on the draft language. Staff received 17 phone calls or e-mails from those who received the letter, and 14 people have agreed to participate in the stakeholder group. The

group has been e-mailed the latest drafts for review and comment. No comments have been received to date.

The project timeline is as follows:

November 29, 2018 – Planning Commission hearing
November 29, 2018 – City Council study session (starts after 7:30 p.m.)
December 20, 2018 – City Council hearing

EXHIBITS

1. Amendments to Chapter 10 of the Municipal Code
2. Amendments to the Environmental Element of the Comprehensive Plan
3. ESEE analysis for the 2016 LWI

DEFINITIONS.
10.012 **Definitions, Specific.**

Jurisdictional delineation – A delineation of a wetland boundary, approved by the Oregon Department of State Lands, and the U.S. Army Corps of Engineers if required. A delineation is a precise map and documentation of actual wetland boundaries on a parcel, whereas a determination may only be a rough map or a presence/absence finding.

Local Wetland Inventory (LWI) – A comprehensive survey showing the estimated location of wetlands and a description of each wetland's classification type within a designated area. Reports include: ~~entitled~~ *Local Wetlands Inventory and Oregon Freshwater Assessment Method Analysis, City of Medford, October 1995*, *Medford Local Wetland Inventory and Locally Significant Wetland Determination, 2002,* and *City of Medford Urban Reserve Local Wetlands Inventory Report Jackson County, Oregon, 2016.* ~~and any subsequent revisions.~~

Locally significant wetland ~~– Wetland sites that provide functions or exhibit characteristics that are pertinent to community planning decisions made at the local level. Locally significant wetlands are as determined by OAR 141-86-350. The Medford Comprehensive Plan specifies the optional wetlands, if any, determined to be locally significant.~~ A wetland that is determined to be significant under the criteria of OAR 141-86-0300 et seq. These criteria include those wetlands that score a high rating for fish or wildlife habitat, hydrologic control, or water quality improvement functions. The Medford Comprehensive Plan specifies the wetlands determined to be locally significant.

Oregon Freshwater Wetland Assessment Methodology (OFWAM) – A wetland function and quality assessment methodology developed by the Oregon Department of State Lands.

Wetland - An area inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which, under normal circumstances, does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland buffer – An area surrounding or adjacent to a locally significant wetland in which development is limited to reduce the adverse effects of land uses on water quality and habitat functions of the wetland. The buffer is either 50 feet or 25 feet in width based on the type of wetland.

RIPARIAN CORRIDORS (10.920 – 10.928)

10.920 **Riparian Corridors, Purposes.**
The purposes of establishing riparian corridors are:
(1) To implement the goals and policies of the "Environmental Element" and the "Greenway" General Land Use Plan (GLUP) designation of the *Medford Comprehensive Plan* and achieve their purposes.
(2) To protect and restore Medford's waterways and associated riparian areas, thereby protecting and restoring the hydrologic, ecologic, and land conservation functions these areas provide for the community.

(3) To protect fish and wildlife habitat, enhance water quality, control erosion and sedimentation, preserve native vegetation, and reduce the effects of flooding.
(4) To protect and restore the natural beauty and distinctive character of Medford's waterways as community assets.
(5) To provide a means for coordinating the implementation of the Bear Creek Greenway and other greenways or creek restoration projects within the City of Medford.
(6) To enhance the value of properties near waterways by utilizing the riparian corridor as a visual amenity.
(7) To enhance coordination among local, state, and federal agencies regarding development activities near waterways.
[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000.]

10.921 **Riparian Corridors, Definitions.**
The following definitions shall apply to Sections 10.920 through 10.928, "Riparian Corridors":

Fish-bearing stream - A stream inhabited at any time of the year by anadromous or game fish species, or fish that are listed as threatened or endangered species under the federal or state Endangered Species Act.

Jurisdictional delineation **–** A delineation of a wetland boundary, approved by the Oregon Department of State Lands, and the U.S. Army Corps of Engineers if required.~~, of the wetland boundary.~~ A delineation is a precise map and documentation of actual wetland boundaries on a parcel, whereas a determination may only be a rough map or a presence/absence finding.

Locally significant wetland ~~– Wetland sites that provide functions or exhibit characteristics that are pertinent to community planning decisions made at the local level. Locally significant wetlands are as determined by OAR 141-86-350. The Medford Comprehensive Plan specifies the optional wetlands, if any, determined to be locally significant.~~ A wetland that is determined to be significant under the criteria of OAR 141-86-0300 et seq. These criteria include those wetlands that score a high rating for fish or wildlife habitat, hydrologic control, or water quality improvement functions. The Medford Comprehensive Plan specifies the wetlands determined to be locally significant.

Local Wetland Inventory (LWI) – A comprehensive survey showing the estimated location of wetlands and a description of each wetland's classification type within a designated study area. Reports include: *Local Wetlands Inventory and Oregon Freshwater Assessment Method Analysis, City of Medford, October 1995*, *Medford Local Wetland Inventory and Locally Significant Wetland Determination, 2002*, and *City of Medford Urban Reserve Local Wetlands Inventory Report Jackson County, Oregon, 2016.*

Oregon Freshwater Wetland Assessment Methodology (OFWAM) **–** A wetland function and quality assessment methodology developed by the Oregon Department of State Lands.

Riparian area - The area adjacent to a stream consisting of the area of transition from the aquatic ecosystem to a terrestrial ecosystem.

Riparian corridor - The area that includes the water, fish habitat, riparian area, and wetlands of an identified stream.

Riparian corridor boundary – An imaginary line that is a defined distance upland from the top of bank.

Riparian vegetation - Native ground cover, shrubs, trees, and other vegetation predominately influenced by their association with water.

Stream – A channel such as a river or creek that carries flowing surface water, including perennial streams and intermittent streams with defined channels, and excluding man-made irrigation and drainage channels.

Top-of-bank - The two-year recurrence interval flood elevation.

Wetland – An area inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which, under normal circumstances, does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland buffer – An area surrounding or adjacent to a locally significant wetland in which development is limited to reduce the adverse effects of land uses on water quality and habitat functions of the wetland. The buffer is either 50 feet or 25 feet based on the type of wetland.
[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000; Amd. Sec. 1, Ord. No. 2011-124, Oct. 6, 2011.]

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10.108 **Land Use Review Procedure Types.**

Table 10.108-1. Land Use Review Procedures

Land Use Review Type	Procedural Type	Applicable Standards	Approving Authority	Subject to 120 Day Rule (ORS 227.178)?
Hardship Exception in Wetland Protection Area	III	10.949	Planning Commission	Yes
Permitted Uses in Wetland Protection Areas	II or III	10.947	Planning Director or Planning Commission/SPAC/LHPC	Yes

Reduction to Wetland Protection Area	II	10.948	Planning Director	Yes

10.110 **Designation and Duties of Approving Authorities**.
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(D) Planning Commission Authority.

(1) The Planning Commission shall have all powers set forth in ORS 227.090 (Powers and Duties of Commission) except as otherwise provided by ordinance of the City Council.

(2) The Planning Commission is hereby designated as the approving authority for the following land use reviews:

Land Use Review
Appeals (See Section 10.140)
Conditional Use Permit
Exception
Hardship Exception in Wetland Protection Area
Park Development Review
Permitted Uses in Wetland Protection Area
Preliminary Planned Unit Development (PUD) Plan
Subdivision Tentative Plat
Zone Change (Minor)

(H) Site Plan and Architectural Commission Authority.

The Site Plan and Architectural Commission is hereby designated as the approving authority for the following land use reviews:

Land Use Review
Exception
Hardship Exception in Wetland Protection Area
Major Modification of Site Plan and Architectural Review Approval
Permitted Uses in Wetland Protection Area
Site Plan and Architectural Review

(L) The Landmarks and Historic Preservation Commission Authority.

The Landmarks and Historic Preservation Commission is hereby designated as the approving authority for the following land use reviews:

Land Use Review
Appeals (See Section 10.140)
Exceptions
Hardship Exception in Wetland Protection Area
Historic Review
Permitted Uses in Wetland Protection Area

(Q) Planning Director Authority. The Planning Director is hereby designated as the approving authority for Type I and II land use reviews as well as issuance of the Development Permit. This includes the following land use reviews:

Land Use Review
De Minimis Revision(s) to Approved PUD Plan
Final PUD Plan
Final Plat, Partition/Subdivision
Minor Historic Review
Minor Modification to Conditional Use Permit
Minor Modification to a Park Development Review
Minor Modification to Site Plan and Architectural Review
Nonconformities
Permitted Uses in Wetland Protection Area
Pre-Application
Property Line Adjustment
Reduction to Wetland Protection Area
Riparian Corridor Reduction or Deviation
Sign Permit
Tentative Plat, Partition
Wireless Communication Facilities in Public Right-of-Way

10.182 **Type III Land Use Actions.**

(A) Type III actions comprise the following land use reviews:

Land Use Action
Conditional Use Permit
Exception
Hardship Exception in Wetland Protection Area
Historic Review
Park Development Review
Permitted Uses in Wetland Protection Area
Preliminary PUD Plan
Site Plan and Architectural Review
Subdivision Tentative Plat
Zone Change

10.922 **Riparian Corridors, Applicability.**

A. The provisions of Sections 10.920 through 10.928, "Riparian Corridors," shall be applied to:

(1) Those waterways, or portions thereof, identified by the *Medford Comprehensive Plan* as being fish-bearing streams, and any other waterways, or portions thereof, specified in the *Medford Comprehensive Plan* as having riparian areas determined to be significant.

(a) Those portions of streams designated fish-bearing in the *Comprehensive Plan* include: Bear, Elk, Swanson, Lone Pine, Lazy, Larson, Gore, and Crooked Creeks. Specifically:

i. Bear Creek: all of Bear Creek in the city limits of Medford.

ii. Elk Creek: from Beall Lane south 0.05 miles.

iii. Swanson Creek: from Crater Lake Highway west 0.38 miles.
iv. Lone Pine Creek: from Bear Creek east 1.8 miles to Temple Drive.
v. Lazy Creek: from Bear Creek east 1.68 miles.
vi. Larson Creek: from Bear Creek east 3.9 miles to North Phoenix Road, and the south fork of Larson Creek from North Phoenix Road east. ~~1.2 miles.~~
vii. Gore Creek: from Bear Creek southwest 0.82 miles.
viii. Crooked Creek: from Bear Creek southwest 2.08 miles.

(2) The provisions shall apply regardless of whether or not a building permit, development permit, or plan authorization is required, and do not provide any exemption from state or federal regulations.

(3) Where riparian corridors are located within the Southeast (S-E) overlay zoning district, the provisions of Sections 10.920 through 10.928, "Riparian Corridors," shall take precedence.

(4) When a locally significant wetland is located within or adjacent to a riparian corridor, the riparian corridor setback will be applied, and shall be measured from the boundary of the wetland.

B. Applications for land use plan ~~authorizations~~approvals (except Annexations), development permits, or building permits, and plans for proposed public facilities on parcels containing a riparian corridor, or a portion thereof, shall contain a to-scale drawing that clearly delineates the top-of-bank and riparian corridor boundary on the entire parcel or parcels.

C. When reviewing plan authorization or development permit applications for properties containing a riparian corridor, or portion thereof, the approving authority should consider the purpose statements in section 10.920, "Riparian Corridors, Purposes" in determining the extent of the impact on the riparian corridor.

D. The Planning Commission shall be the approving authority for applications for exceptions to the provisions herein pertaining to Riparian Corridors. In addition to the provisions of Sections 10.251 through 10.254 "Exception Application," such a request shall be submitted to the Oregon Department of Fish and Wildlife for a habitat mitigation recommendation pursuant to O.A.R. 635-415 "Fish and Wildlife Habitat Mitigation Policy."

E. In lieu of the provisions of this section, the significance of individual stream reaches may be determined per the provisions in OAR 660-023-0090. Such a proposal shall be pursued through a Comprehensive Plan Amendment, consistent with Sections 10.181-10.184.

[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000; Amd. Sec. 2, Ord. No. 2011-124, Oct. 6, 2011.]

10.924 **Permitted Activities within Riparian Corridors.**

A. Any use, sign, or structure, and the maintenance thereof, lawfully existing on the date of adoption of the provisions herein, is permitted within a riparian corridor. Such use, sign, or structure may continue at a similar level and manner as existed on the date of adoption of the provisions herein. The maintenance and alteration of pre-existing ornamental landscaping is permitted within a riparian corridor as long as no additional riparian vegetation is disturbed. The provisions of this section shall not be affected by any change in ownership of properties containing a riparian corridor.

B. The following activities, and maintenance thereof, are permitted within a riparian corridor, subject to obtaining applicable permits, if any, from the Oregon Department of State Lands and the U.S. Army Corps of Engineers. All plans for development and/or improvements within a riparian corridor shall be submitted to the Oregon Department of Fish and Wildlife for a habitat

mitigation recommendation pursuant to O.A.R. 635-415 "Fish and Wildlife Habitat Mitigation Policy."

(1) Waterway restoration and rehabilitation activities such as channel widening, realignment to add meanders, bank grading, terracing, reconstruction of road crossings, or water flow improvements.

(2) Restoration and enhancement of native vegetation, including the addition of canopy trees; cutting of trees which pose a hazard due to threat of falling if the tree is left in the riparian area after felling; or removal of non-native vegetation if replaced with native plant species at the same amount of coverage or density so that native species dominate.

(3) Normal farm practices, other than structures, in existence at the date of adoption of the provisions herein, on land zoned for Exclusive Farm Use.

(4) Normal flood control channel maintenance practices within a waterway, other than structures, necessary to maintain flow.

(5) Replacement of a permanent legal nonconforming structure in existence at the date of adoption of the provisions herein with a structure in the same location, if it does not disturb additional riparian area, and in accordance with the provisions of Sections 10.032 through 10.037 "Non-Conformities."

(6) Expansion of a permanent legal nonconforming structure in existence at the date of adoption of the provisions herein, if the area of the expansion is not within the riparian corridor, and in accordance with the provisions of Sections 10.032 through 10.037 "Non-Conformities."

(7) Perimeter mowing and other cutting necessary for hazard prevention.

(8) Improvements to, and maintenance of, the Medford International Airport and its runway protection zone, to meet the Federal Aviation Administration's regulations, advisory circulars, and guidelines.

(9) Maintenance and repair of existing driveways, roads and streets, including repaving and repair of existing bridges, and culverts, provided such practices avoid sedimentation and other discharges into the waterway.

(10) Emergency stream bank stabilization to protect threats to life or property. (State or Federal emergency authorization may be required for in-stream work.)

C. New fencing may be permitted subject to consideration by the Planning Director or designee in consultation with the Director of Public Works and applicable state and federal agencies. An application for new fencing within a riparian corridor shall contain a to-scale drawing that clearly delineates the top-of-bank and riparian corridor boundary on the entire parcel or parcels, and shall indicate why the proposal is necessary and how it minimizes intrusion into the riparian corridor.

[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000; Amd. Sec. 4, Ord. No. 2011-124, Oct. 6, 2011.]

10.925 **Conditional Uses within Riparian Corridors.**

The following activities, and maintenance thereof, are allowed within a riparian corridor if compatible with Section 10.920, "Riparian Corridors, Purposes," and if designed to minimize intrusion. Such activities shall be subject to approval of a Conditional Use Permit, which may be considered separately or in conjunction with another plan authorization review. The approving

authority must determine that the proposal complies with at least one of the Conditional Use Permit criteria. Applicable permits, if any, from the Oregon Department of State Lands and the U.S. Army Corps of Engineers shall subsequently be obtained. All development and improvement plans shall be submitted to the Oregon Department of Fish and Wildlife for a habitat mitigation recommendation pursuant to O.A.R. 635-415 "Fish and Wildlife Habitat Mitigation Policy."

(1) Water-related or water-dependent uses, such as drainage facilities and irrigation pumps.

(2) Utilities or other public improvements.

(3) Streets, roads, or bridges where necessary for access or crossings.

(4) Multi-use paths, access ways, trails, picnic areas, or interpretive and educational displays and overlooks, including benches and outdoor furniture.[CGP1]

[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000.]

10.926 **Prohibited Activities within Riparian Corridors.**

The following activities are prohibited within a riparian corridor, except as permitted in Sections 10.924 "Permitted Activities within Riparian Corridors" and 10.925 "Conditional Uses within Riparian Corridors."

(1) Placement of new structures or impervious surfaces.

(2) Excavation, grading, fill, stream alteration or diversion, or removal of vegetation except for fire protection purposes or removing hazardous trees.

(3) Expansion of areas of pre-existing non-native ornamental landscaping such as lawn, gardens, etc.

(4) Dumping, piling, or disposal of refuse, yard debris, or other material.

(5) Wireless communication facilities.

(6) Discharge or direct runoff of untreated stormwater.

[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000; Amd. Sec. 7, Ord. No. 2008-04, Jan. 3, 2008.]

10.927 **Riparian Corridors, Reduction or Deviation.**

A request to reduce or deviate from the riparian corridor boundary provisions of this section may be submitted to the Planning Director or designee for consideration. A deviation request may be approved as long as equal or better protection of the riparian area will be ensured through a plan for restoration, enhancement, or similar means. Such a plan shall be submitted to the Oregon Department of Fish and Wildlife for a habitat mitigation recommendation pursuant to O.A.R. 635-415 "Fish and Wildlife Habitat Mitigation Policy." In no case shall activities prohibited in Section 10.926 (1) through (3), "Prohibited Activities within Riparian Corridors" be located any closer than 25 feet from the top-of-bank. The Planning Commission shall be kept advised of the outcome of deviation or reduction requests. Any decision of the Planning Director may be appealed to the City Council as provided in Chapter 10 of the Code of Medford.

[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000.]

10.928 **Conservation and Maintenance of Riparian Corridors.**

When approving applications for the following plan authorizations: Land Divisions, Planned Unit Developments, Conditional Use Permits, and Exceptions, or for development for properties containing a riparian corridor, or portion thereof, the approving authority shall assure long term conservation and maintenance of the riparian corridor through one of the following methods:

(1) The area shall be protected in perpetuity by a conservation easement recorded on deeds and plats prescribing the conditions and restrictions set forth in Sections 10.920 through 10.928, "Riparian Corridors," and any imposed by state or federal permits; or,
(2) The area shall be protected in perpetuity through ownership and maintenance by a private non-profit association by conditions, covenants, and restrictions (CC&Rs) prescribing the conditions and restrictions set forth in Sections 10.920 through 10.928, "Riparian Corridors," and any imposed by state or federal permits; or,
(3) The area shall be transferred by deed to a willing public agency or private conservation organization with a recorded conservation easement prescribing the conditions and restrictions set forth in Sections 10.920 through 10.928, "Riparian Corridors," and any imposed by state or federal permits; or,
(4) The area shall be protected through other appropriate mechanisms acceptable to the City of Medford which ensure long-term protection and maintenance.
[Added, Sec. 1, Ord. No. 1999-215, June 1, 2000.]
10.929 thru 10.932 [Repealed - Sec. 1, Ord. No. 5918, July 16, 1987.]

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WETLANDS 10.940 – 10.952

10.940 Purpose Statements.
The purpose and intent of this section is:

1) To implement the goals and policies of the "Environmental Element" of the *Medford Comprehensive Plan* related to wetlands and achieve their purposes.
2) To protect and restore Medford's wetland areas, thereby protecting and restoring the hydrologic, ecologic, and land conservation functions these areas provide for the community.
3) To protect fish and wildlife habitat, enhance water quality, control erosion and sedimentation, preserve native vegetation, and reduce the effects of flooding.
4) To protect and restore the natural beauty and distinctive character of Medford's wetlands as community assets.
5) To enhance the value of properties near wetlands by utilizing the wetland as a visual amenity.
6) To enhance coordination among local, state, and federal agencies regarding development activities near wetlands.
7) To implement state and federal law with respect to protecting Medford's significant wetlands and the protection of clean water, pollution and flooding control, and preservation of endangered species.
8) To improve public awareness and appreciation of wetlands for their unique ecosystem functions and the visual and environmental benefits they provide.

10.941 Definitions.
See Sections 10.012 and 10.921 for defined terms

10.942 Applicability.

1) The provisions of this section apply to all lands containing wetlands.
2) State and federal wetland regulations apply within the City, regardless of whether or not these areas are mapped in the Local Wetland Inventories identified in the Comprehensive Plan. Nothing in this section shall be interpreted as superseding or nullifying state or federal requirements. In addition, the City shall provide notification to the Oregon Department of State Lands (DSL), as required by Oregon Administrative Rule, Division 23, for applications for development permits or other land use decisions affecting wetlands on the inventory.
3) It is the responsibility of the property owner to demonstrate compliance with this section is met or is not applicable for proposed uses, development activity, or land alterations. The Planning Director or designee may make a determination that a wetland is not located on a particular site or is not impacted by proposed development activity or uses based on the relevant local wetland inventory, site visit, and any other pertinent information. In situations where the location of the wetland(s) is unclear or disputed, the Planning Director or designee may require a survey, delineation prepared by a qualified surveyor or natural resource professional, or certified statement from a natural resource professional that no wetland(s) exist on the site.
4) Wetlands shall be protected from alteration and development, except as provided for in this section. No person or entity shall alter, use, or allow to be altered or use any real property identified as a wetland, except as set forth in an approved land use application or permit authorized in this section.
5) In the case where this section and any other ordinance, provision, or recorded document conflict or overlap, the one that imposes the more stringent restrictions shall prevail.

10.943 Inventory of Medford's Wetlands.

The approximate locations of Medford's wetlands within the City limits, Urban Growth Boundary, and Urban Reserve are identified in the Comprehensive Plan specifically the 2002 and 2016 Local Wetland Inventories (Ordinances 2003-135 and 2018-XXX). The location of these wetlands are recognized to be approximate. A more precise wetland boundary may be mapped, staked, delineated, and used for development review purposes without a modification of the maps contained in the Comprehensive Plan.

10.944 Wetland Protection Areas.

The City has conducted two separate wetland inventories for land within the city limits, the Urban Growth Boundary, and the Urban Reserve. The 2002 Local Wetland Inventory provides the location of wetlands within the city limits and 1993 Urban Growth Boundary limits. The 2016 Local Wetland Inventory provides the location of wetlands within the entire Urban Reserve and the 2018 Urban Growth Boundary limits. To date, wetlands have been reviewed and regulated through state and federal permits with no specific local protection regulations imposed. The following types of wetland protection areas are established to protect wetland resources.

The 2002 and 2016 Local Wetland Inventories (LWI), as summarized in the Comprehensive Plan, identify the approximate location of Locally Significant Wetlands and Other Identified Wetlands. The precise boundary of a wetland and associated wetland buffer shall be established through an on-site wetland delineation prepared by a natural resource professional and depicted on a site plan map or tentative plat map.

Wetland Buffer requirements for 2002 and 2016 Wetlands

1. Locally Significant Wetlands. For wetlands classified as Locally Significant on the inventories, the wetland protection area shall consist of all lands identified on the wetland delineation, plus a wetland buffer consisting of all lands within 50 feet of the upland edge of the wetland. Instead of completing a wetland delineation, a 50 foot buffer may be placed around the perimeter of the significant wetland identified on the LWI along with a detailed plan submitted by a natural resource professional demonstrating equal or better protection of the functions and values of the wetland resource will be ensured.
2. Other Identified Wetlands. For wetlands not classified as Locally Significant on the inventories, the wetland protection area shall consist of all lands identified on the wetland delineation, plus a wetland buffer consisting of all lands within 25 feet of the upland edge of the wetland. Other Identified Wetlands include all areas designated as such on the inventories and any unmapped wetlands discovered on site. Instead of completing a wetland delineation, a 25 foot buffer may be placed around the perimeter of the identified wetland found on the LWI along with a detailed plan submitted by a natural resource professional demonstrating equal or better protection of the functions and values of the wetland resource will be ensured.
3. Wetlands adjacent to Riparian Corridors. Any locally significant wetlands or other wetlands identified on the inventories that are adjacent to a stream or riparian corridor shall include either a 50 foot or 25 foot wetland buffer respectively measured from the upland edge of the wetland boundary.

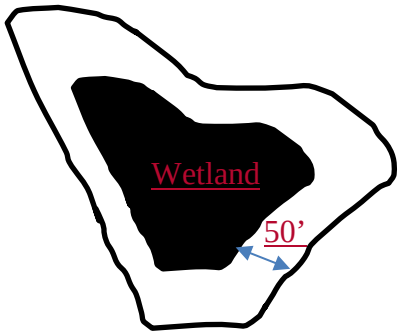


Figure 10.944.1
Wetland Protection Area
for Locally Significant Wetlands

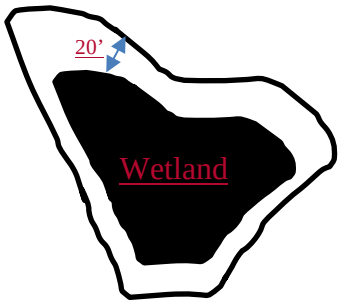


Figure 10.944.2
Wetland Protection Area
for Other Identified Wetlands

10.945 Exempt Activities and Uses within Wetland Protection Areas.
The following activities and uses conducted in a Wetland Protection Area do not require a local permit or approval under this section.

1. Vegetation Maintenance, Planting and Removal.
   a. Landscaping and Lawn Maintenance. The continued maintenance of existing vegetation such as landscaping, lawn, gardens, and trees is exempt. Existing lawn shall not be expanded and new lawn shall not be installed.

b. Tree Pruning. Maintenance pruning of existing trees is exempt. In no case shall the maintenance pruning be so severe that it impacts the tree's health, longevity, or resource functions (such as shade, soil stability, erosion control and the like.)

c. Non-Native, Noxious, and Invasive Vegetation Removal. The removal of non-native, noxious, and invasive vegetation is exempt when replaced with local native plant species.

d. Hazardous Tree Removal. The removal of identified hazardous trees is exempt.

e. Routine Planting. The planting of local native plant species is exempt.

f. Publicly and Commonly Owned Properties. The routine restoration and enhancement of publicly and commonly owned properties such as public parks and private open spaces.

2. Site Investigation and Maintenance.

a. Testing. Site investigation work is allowed provided it has minimal surface area disturbance and is conducted by or required by a city, county, state, or federal agency. Site investigation work such as surveys, soil borings, and percolation tests.

b. Storm Water Treatment Facility Maintenance. Routine maintenance of storm water treatment facilities such as detention ponds, sediment traps, vegetated swales, and new wetland areas in order to maintain flow and prevent flooding when conducted in accordance with local, state, and federal permitting requirements and approved management plans is exempt.

3. City Emergency Activities. Emergency repair authorized by the City Manager or designee which must occur immediately, in order to address at least one of the following:

a. Prevent an imminent threat to public health, safety, or the environment.

b. Prevent imminent danger to public or private property.

4. Fire Hazard Prevention. Perimeter mowing or thinning of vegetation for fire hazard prevention consistent with a wetland mitigation plan approved by the Oregon Department of State Lands.

5. Driveway, Street Maintenance, and Paving. The maintenance, paving, and reconstruction of existing public and private streets, shared-use paths, and driveways is permitted.

6. Normal Farm Practices. Farming practices in existence prior to the adoption of these provisions conducted on land zoned Exclusive Farm Use.

7. Fencing. Fences limited to open wire or similar fence that will not collect debris or obstruct flood waters, but including wire mesh or chain link fencing may be installed in the wetland buffer. Solid wood fencing is prohibited in the Wetland Protection Area. Fencing in a designated floodplain may require a floodplain development permit per Chapter 9.

8. Nonconforming Structures and Uses. A structure or use legally established prior to adoption of this section, which would be prohibited or subject to limitations of this section, shall be considered a nonconforming structure or use and may continue subject to the following provisions.

a. Nonconforming structures or uses within or partially within a wetland

protection area may be maintained and used. A nonconforming structure may be replaced or expanded if the expansion of the footprint occurs outside of the wetland protection area and is in accordance with Sections 10.032-10.037.

10.946 Permitted Uses within Wetland Protection Areas.

The following uses conducted within a wetland protection area are allowed, reviewed, and permitted in accordance with the applicable land use application under review (e.g site plan, land division, transportation facility, etc.) and in accordance with the criteria outlined in Section 10.947. When a Permitted Use is requested independently of a land use application, the applicant shall submit a Type II application for a permit in accordance with Section 10.947. The submittal requirements for Permitted Uses are found in Section 10.950.

1. Construction and Grading Activities. Permanent alteration of the wetland protection area by grading or the placement of structures, fill, or impervious surfaces may be authorized for the following:
    a. New Public Access and Utilities. The location and construction of public streets, bridges, trails, shared-use path connections, and utilities deemed necessary to maintain a functional system and upon finding that no other reasonable, alternate location outside of the wetland protection area exists. The Comprehensive Plan, Transportation System Plan, adopted utility master plans, and other adopted documents shall guide this determination.
    b. New Private Access and Utilities. The location and construction of private streets, driveways, and utilities to provide a means of access to an otherwise inaccessible or landlocked property where no other reasonable, alternate location outside of the wetland protection area exists.
    c. Storm Water Treatment Facility Installation. Installation of public and private storm water treatment facilities such as detention ponds, sediment traps, vegetated swales, and new wetland areas.
2. Wetland Restoration and Enhancement. Wetland restoration and enhancement projects resulting in a net gain in wetland functions.
3. Public and Private Utility Maintenance and Replacement. Routine maintenance and replacement of existing public and private utilities that disturb lands within the wetland protection areas.
4. Airport. Improvements to, and maintenance of the Medford-Jackson County International Airport and its runway protection zone, to meet the Federal Aviation Administration's regulations and guidelines.

10.947 Permitted Uses Permit and Approval Criteria.

All permit uses within a wetland protection area as outlined in Section 10.946 above shall be approved if the proposal meets all of the following criteria.

1. The proposed uses shall be located as far away from the wetland protection area as practicable, designed to minimize intrusion into the wetland protection area, and minimize disturbance of the surface area of the wetland protection area.
2. The proposed uses shall be designed, located, and constructed to minimize adverse impacts on the wetland.
3. Excavation, grading, installation of impervious surfaces, and removal of native vegetation shall be avoided except where no practicable alternative exists, or where

necessary to construct public facilities or to ensure slope stability.

4. Water, storm drain, and sanitary sewer systems shall be designed, located, and constructed to avoid exposure to floodwaters when adjacent to a stream, and to avoid accidental discharge to the wetlands.
5. Wetland restoration and enhancement will be provided through the implementation of a mitigation plan prepared by a natural resource professional.
6. Long term conservation, management and maintenance of the wetland protection area shall be ensured through preparation and recordation of a management plan as outlined in Section 10.951. A management plan is not required for residentially zoned lots occupied only by a single-family dwelling and accessory structures.

10.948 Wetland Protection Area Reduction.

A Wetland Protection Area may be reduced by up to 50 percent through a Type II procedure, if the proposal meets all of the following criteria.

1. The proposed use is designed to avoid intrusion into the Wetland Protection Area by varying a dimensional standard (e.g. setbacks, lot standards) to permit development as far outside of the wetland protection area as possible. Such variation to the applicable dimensional standards shall be reviewed as part of the requested reduction, and shall not be subject to a separate Exception application.
2. The alteration of the wetland protection area is the minimum necessary to efficiently perform the proposed use. The proposed development shall minimize disturbance to the wetland protection area by utilizing the following design options to reduce impacts of development.
    a. Multi-story construction shall be considered.
    b. Parking spaces shall be the minimum necessary for the proposed use.
    c. Pavement shall be minimized, and all pavement used shall be installed and maintained in a porous solid surface paving material (such as pavers, pervious pavement, etc.).
    d. Engineering solutions shall be used to minimize additional grading and fill.
3. The applicant has demonstrated that equal or better protection of the wetland will be provided through restoration, enhancement, and mitigation measures as implemented through a mitigation plan prepared by a natural resource professional.
4. Long term conservation, management and maintenance of the wetland protection area shall be ensured through preparation and recordation of a management plan as outlined in Section 10.951. A management plan is not required for residentially zoned lots occupied only by a single-family dwelling and accessory structures.

10.949 Hardship Exception for Development in the Wetland Protection Area.

A Hardship Exception shall be subject to the Type III procedures and may be approved if the proposal meets all of the following criteria.

1. The application of this section unduly restricts the development or use of the lot, and renders the lot unbuildable.
2. The proposed use would have been permitted prior to the effective date of this ordinance.
3. The applicant has explored all other reasonable options available under this section and other applicable provisions of this ordinance to relieve the hardship.

4. Adverse impacts that would result from approval of the exception have been minimized and will be mitigated to the greatest extent possible through restoration, enhancement, and mitigation measures as implemented through a mitigation plan prepared by a natural resource professional.
5. Long term conservation, management and maintenance of the wetland protection area shall be ensured through preparation and recordation of a management plan as outlined in Section 10.951. A management plan is not required for residentially zoned lots occupied only by a single-family dwelling and accessory structures.

10.950. Application Submittal Requirements. The following information shall be submitted with the application for uses in the Wetland Protection Area which are required to be processed under a Type II or Type III procedure including Permitted Uses, Reductions, and Hardship Exceptions.

A. Required Plans and Information.

1. A narrative description of all proposed uses including the extent to which any Wetland Protection Area is proposed to be altered or affected as a result of the proposed development or use.
2. The amount of land disturbed in square feet and the cubic yards of overall disturbance shall be provided.
3. Written findings of fact addressing all applicable development standards and approval criteria.
4. Map, drawn to scale. The application shall include a site plan or tentative plat map of the subject property prepared by a licensed surveyor, civil engineer, or other design professional that includes the following information. Planning staff may request additional information based upon the site characteristics or proposal.
    a. All watercourses identified (including drainage ways, ponds, canals etc.)
    b. Surveyed location of the Wetland Protection Area, or the location of the Wetland Protection Area as identified in the Local Wetland Inventories with the additional buffer provided.
    c. A wetland delineation (with an accompanying site map) prepared by a natural resource professional and that has been concurred with by the Oregon Department of State Lands (DSL) or the wetland location as shown on the adopted Local Wetland Inventories with a detailed plan submitted by a natural resource professional demonstrating equal or better protection of the functions and values of the wetland resource.
    d. An aerial photograph with the wetland boundaries identified.
    e. Topographic information at two foot contour intervals identifying existing grade and proposed grade changes.
    f. Existing vegetation on site including trees and native and non-native vegetation species.
    g. Location of existing and proposed development, including all existing and proposed structures, any areas of fill or excavation, wetland crossings, alterations to vegetation, or any other site alterations.
    h. Erosion control plan to prevent encroachment and flow of material into the Wetland Protection Area.
    i. Scale and north arrow.

j. Any other applicable permits or information from federal, state, or local sources that help inform the proposed development plans.

5. Mitigation plan prepared by a natural resource professional.
6. Management plan as outlined in Section 10.951.

B. Building Permits and Other Activities. When approval of a land use action is not required, building permits or other activities on properties containing a Wetland Protection Area shall be reviewed by the Planning Director or designee to ensure that Wetland Protection Areas are accurately identified on a site plan and that Permitted Uses or other site disturbances will not be conducted within the Wetland Protection Area. An erosion control plan shall be submitted to prevent impacts to the Wetland Protection Area. When required, these erosion control measures shall be installed and site-verified by the Planning Director or designee before any permits are issued and prior to any grading, clearing, or construction commences on the land.

C. Required Information Waived. Applications under this chapter involving properties containing a Wetland Protection Area shall accurately indicate the locations of these features and all other information as described above. The Planning Director or designee may waive one or more of the required elements in Section 10.950(A) above if evidence is provided conclusively demonstrating that proposed excavation, grading, site clearing, construction, or similar actions resulting in changes to the property are not located within the boundaries of the Wetland Protection Area.

10.951 Management Plan. The applicant shall implement a management plan for the Wetland Protection Area to assure long term conservation and maintenance. The management plan shall detail proposed monitoring and maintenance, and shall include a schedule delineating how completed projects will be monitored and reported to the Planning Department. The management plan shall contain the following requirements.

1. The approved mitigation plan.
2. Identification of management practices to be conducted and proposed schedule.
3. Provisions for the ongoing removal and management of noxious and invasive vegetation and debris.
4. Provisions for the protection of protected plant and animal species in accordance with recommendations from applicable state and federal agencies.
5. No deviations to the management plan or alteration of the size, shape, or design of the Wetland Protection Area without prior approval by the City.
6. Provisions for the perpetual protection and maintenance of the Wetland Protection Area including but not limited to the following:
   a. Recordation of a conservation easement or Conditions, Covenants, and Restrictions (CC&Rs) which prescribe the conditions and restrictions set forth in the approved land use action, building permit, or public facility plans, and any imposed by state or federal permits.
   b. Transfer of ownership and maintenance responsibilities for the area to a willing public agency, non-profit association, or private conservation organization with a recorded conservation easement prescribing the conditions and restrictions set forth in the approved land use action, building permit, or public facility plans, and any imposed by state or federal permits.

c. Other mechanisms addressing long term protection, maintenance, and mitigation consistent with the purposes and requirements of this ordinance as deemed appropriate and acceptable by the approval authority.

10.952 Performance Guarantee. In general, mitigation shall be implemented prior to final plat or certificate of occupancy for projects. Circumstances such as seasonal reasons may warrant additional time to complete the mitigation project. Installation may be deferred for up to six months following the issuance of the final plat or certificate of occupancy when a surety bond or cash in the amount of 125% of the estimated cost is provided to the City. The security is to guarantee the mitigation proposal will be carried out as approved, and to ensure the objectives are met through demonstration of compliance with measureable standards and that the site will be maintained to keep the wetland functioning properly.

10.953 Map Errors and Adjustments.
The Planning Director or designee may authorize a correction to a wetland on the adopted Local Wetland Inventories when the applicant has proven a mapping error has occurred or a correction is needed and the error or correction has been verified by the Oregon Department of State Lands (DSL). Delineations verified by DSL shall be used to automatically update the Local Wetland Inventories and a copy of the wetland delineation document shall be retained in the Planning Department. No formal plan amendment is required for map corrections where an approved delineation with a DSL letter of concurrence is provided. Approved delineations shall be subject to the terms of expiration set forth in the DSL approval.

WETLANDS

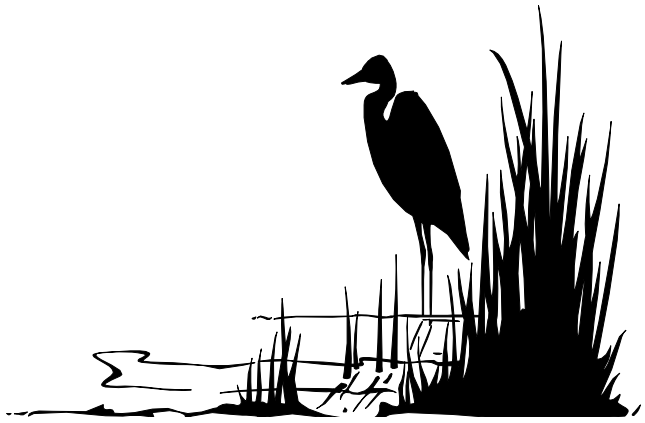
In the past, few standards regulated the planning, development, or preservation of wetlands in Oregon's urban areas. Further, variations from one locale to another across the state resulted in inconsistent policies for preservation or development. More recently, a renewed appreciation of wetlands has led to the development and enforcement of greater federal and state regulations to guide wetland planning in urban areas. There has been increased recognition of wetlands as:

- Important habitats necessary for the survival of many aquatic and terrestrial species
- Integral parts of the hydrologic system necessary for the maintenance of water supplies and water quality

FEDERAL AND STATE REGULATIONS

The principal federal law that regulates activities in wetlands is Section 404 of the Clean Water Act. Section 404 restricts the discharge of wastes, including fill material, into the waters of the United States, which are broadly defined as coastal waters, rivers, streams, estuaries, and wetlands. The U.S. Army Corps of Engineers is responsible for administering Section 404. Wetlands are defined as "those areas that are inundated or saturated with surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."[24]

To be considered a jurisdictional wetland, or one regulated by Clean Water Act regulations, the wetland must contain wetland plants, hydric soils, and saturated or inundated substrate. Permits are required from the U.S. Army Corps of Engineers and the Oregon ~~Division~~ Department of State Lands (DSL) to fill or drain a jurisdictional wetland. If the activity cannot be justified, permits are not issued. If the activity is justified, the permits are likely to require compensatory mitigation, to replace the acreage and values of the wetland area lost.[25]



Planning efforts to satisfy federal and state wetland regulations are shifting to the local level. The Oregon Department of Land Conservation and Development (DLCD) has established the responsibilities that cities and counties have regarding wetlands under Goal 5. To comply with the wetlands requirements of Goal 5, local governments must conduct a Local Wetland Inventory (LWI) and adopt ~~a~~ "safe harbor" or similar regulations ~~ordinance~~ that protect~~s~~ locally significant wetlands, and/or develop protections through an ESEE analysis process as described in the previous section.

[24] *Comprehensive Medford Area Drainage Master Plan*, September 1996.

[25] *West Eugene Wetlands Plan*, City of Eugene and Lane Council of Governments, December 1992.

In 1995, the City of Medford completed its first "*Local Wetlands Inventory (LWI) and Oregon Fresh Water Wetland Assessment Method Analysis*," which documented the presence, location and size of the wetlands in the UGB. The LWI and OFWAM analyses were updated and approved by DSL in 2002 (*Medford Local Wetland Inventory and Locally Significant Wetland Determinations*, 2002 by Wetland Consulting). See **Figure 6** for a general vicinity map of Medford area wetlands. The official LWI maps are available in the Medford Planning Department. A qualitative assessment of the wetlands was conducted according to the Oregon Freshwater Wetland Assessment Method (OFWAM)[26]. DSL is required to be notified of all applications ~~to the City of Medford~~ for development activities, including applications for plan ~~authorizations~~approvals, development permits, or building permits, and of development proposals by the City of Medford, that may affect any wetlands, streams, or waterways identified and/or mapped in the *Local Wetlands Inventory*.

The 2002 LWI inventoried and mapped 134 wetland sites in the UGB, and mapped, but did not inventory the waterways. The waterways were inventoried, mapped, and assessed in a separate process. See the *Medford Riparian Inventory and Assessment Bear Creek Tributaries*, 2002 by Wetland Consulting. There was a total of 293 acres of wetlands inventoried, including created ponds ~~in addition to the~~ and natural wetlands. *Palustrine forested* and *scrub- -shrub* wetland plant communities are common along stream corridors, typically confined to a narrow strip along steeply banked watercourses. Dominant tree species include black cottonwood, white alder, and Oregon ash. Understory shrubs include willow, choke cherry, wild rose, and snowberry. Himalayan blackberry vines, an invasive introduced species, often dominate understory areas, especially those that have been disturbed. The *palustrine emergent* wetlands are dominated by herbaceous plants such as cattails, rushes, sedges, and reed-canary grass in inundated areas, and teasel, tall fescue, buttercup, and velvet grass adjacent to the water.

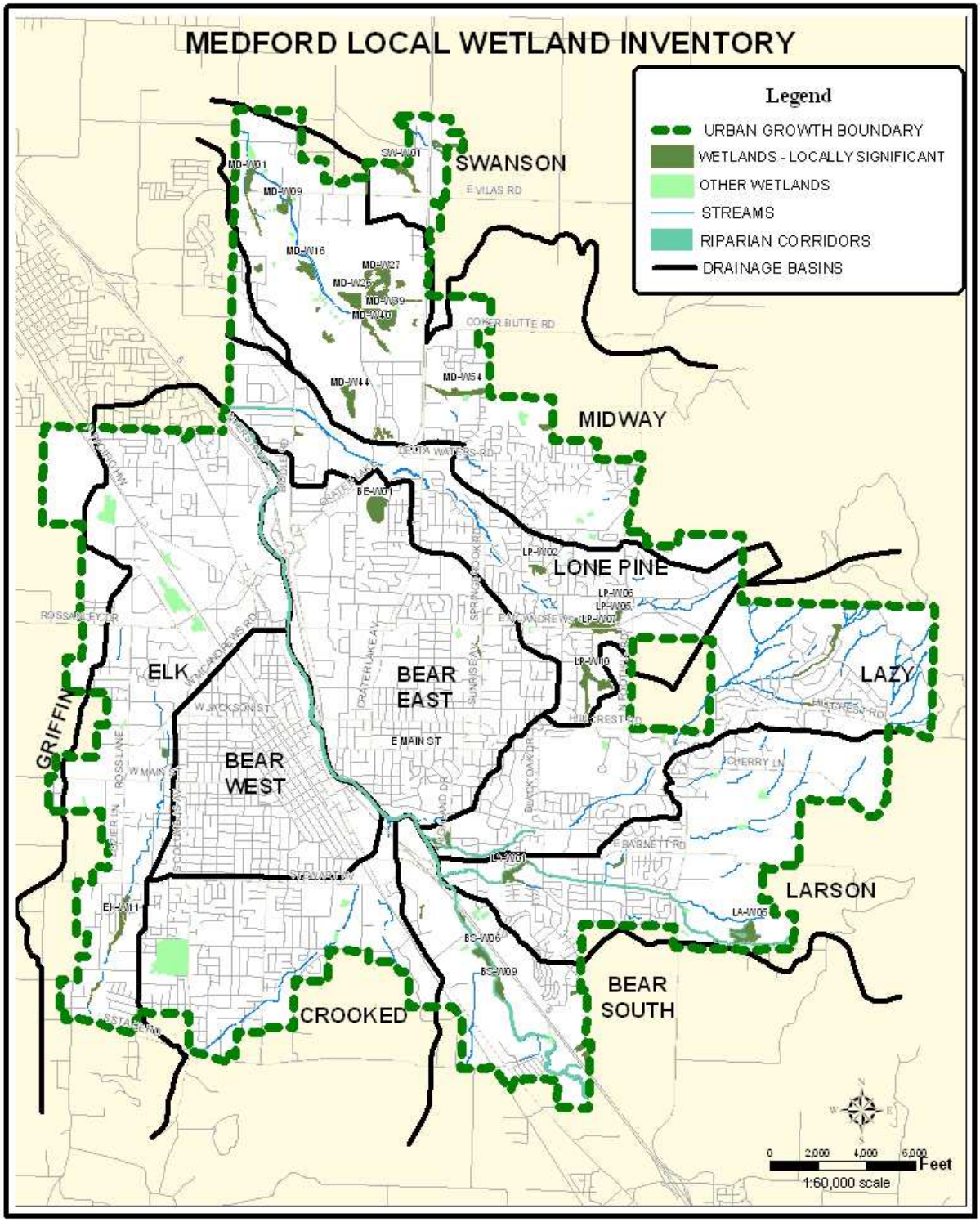
Vernal pools, which are rare rain-fed seasonal wetlands, have been found in the Agate Desert area north of the Medford UGB and in the northern portion of the UGB in and near the Airport in areas having Agate-Winslo soils. The hard pan underlying the soil restricts infiltration, causing prolonged inundation. An inventory and assessment of the vernal pools in the Agate Desert area was completed by DSL in 1997. Most historic vernal pools located within the Medford UGB have been severely altered or obliterated due to grading and vegetation alterations, although some may still be identified as wetlands.

Some threatened or endangered plant species are known to occur in conjunction with vernal pools in Jackson County, including Cooks (Agate Desert) lomatium and large-flowered wooly meadowfoam. Both are listed as Endangered Species by the state of Oregon and Candidate Species under the federal *Endangered Species Act*. Agate Desert lomatium (*loamtium cookii*), which is known to occur only in Jackson and Josephine Counties, has been identified on the grounds of the Rogue Valley International-Medford Airport, which is within the UGB.[27] The RVCOG is managing a cooperative effort, the Agate Desert Vernal Pools Project, initiated to develop a wetland conservation plan for the Agate Desert vernal pool area. Jackson County, the City of Medford, the Nature Conservancy, DSL, ODFW, the U.S. Army Corps, and the U.S. EPA are among the participating agencies.

[26]Statewide methodology used in the *Local Wetlands Inventory* for assessing and determining the significance of the wetlands in Medford.

[27]*Draft Environmental Assessment, Rogue Valley International-Medford Airport, Proposed Improvements*, March 1999, David Evans and Associates, Inc.

Figure 6: Medford Area Wetlands



The City of Medford owns property in the vicinity of the Water Reclamation Facility and Whetstone Creek, located outside the UGB near Antelope Road, that contains vernal pools and other wetlands. Some of this land is potentially suitable as mitigation sites for wetland impacts caused by City infrastructure projects.

Determination of Local Significance

The LWI/OFWAM is a "first layer" planning tool for identifying the most valuable wetlands in the Medford UGB. OFWAM assessments of the wetlands are used in making a determination of *significance* according to state standards (OAR 141-086-0350). In addition, other wetlands may be adopted by the City Council as *locally significant*. Using the OFWAM criteria, 45 of the inventoried wetlands in the Medford UGB were determined to be locally significant. Nearly half are locally significant due to having a water quality function and being located within one-quarter mile of a "water-quality-limited stream". Several significant wetlands have direct surface water connections to Bear Creek and Larson Creek, which are habitat for "indigenous anadromous salmonids". See **Appendix C** for the inventory of locally significant wetlands.

Uses Conflicting with Wetland Protection

Occasionally, the protection of a locally significant wetland may conflict with other important community goals. After a sound ESEE analysis, the City Council may make a finding that a particular "conflicting use" is more important to the long-term needs of the citizens than preservation of the wetland area. The most common conflicting uses have been critical links in the City's arterial and collector street system. In many cases, a street crossing can be accomplished without serious disruption of a wetland, such as along a riparian corridor. In other cases, fill and compensatory mitigation may be required if an alternative location is not available. The ESEE analysis will result in a determination that the identified conflicting use will be permitted, limited, or prohibited.

Wetland Mitigation

Under current federal and state laws, any wetland losses must be compensated through creation of new wetlands, restoration of former wetlands, and/or enhancement of existing wetlands. Mitigation efforts not only satisfy federal and state laws, but attempt to achieve a balance between competing land uses. The 1995 LWI recommended that *"an active land acquisition plan and schedule are required to acquire key locations for future wetlands mitigation. Without such a plan, many potential sites may be permanently lost."* A *Wetlands Mitigation Concept Plan* prepared for the City of Medford in 1996, presented methods for mitigating wetland losses. The 2002 LWI identified some potential mitigation sites within the UGB.

One means to achieve wetland preservation objectives is through the establishment of a regional wetland mitigation bank. Freshwater mitigation banking is addressed in the *Oregon Mitigation Bank Act of 1987*. Often, wetland loss compensation is conducted on a piecemeal basis as individual development projects are completed. As a result, many newly created wetlands are small, isolated, and of marginal value as wildlife habitat, a primary intent of wetland mitigation. In some circumstances, development is slowed by a lack of suitable wetland mitigation sites. As noted in the 2002 LWI, the most appropriate mitigation sites in the Medford UGB are those that are made up of dewatered hydric soils over five acres in size. They are often located near existing drainageways, including one in the undeveloped Southeast Medford area near Larson Creek, a primary tributary of Bear Creek, that could serve several functions, including water quality control and open space connections, possibly through the designation of conservation areas and greenways. The Bear Creek corridor is also being evaluated to determine if suitable mitigation sites are located along the waterway.

Refer to the *Wetlands Mitigation Concept Plan* for a more detailed description of the suggested wetland mitigation strategies.

WETLAND FUNCTIONS IN AN URBAN ENVIRONMENT

Wetlands in urban areas serve a variety of roles in achieving community needs and objectives, including the provision of educational and recreational opportunities. Locally significant wetlands are those that have been determined to serve one or more of the following functions: preservation/diversification of wildlife, maintenance of fish habitat, improvement of water quality, or hydrologic control.

The critical functions wetlands can provide within urban areas include, but are not limited to:

Stormwater Management

The use of open channels and wetlands in an integrated storm drainage system provides a better balance between stormwater conveyance and flood control needs, and environmental and community needs. The *Drainage Master Plan* recommends the development and implementation of a local wetlands management plan that incorporates flood control, water quality control, and principles of natural resource management. Such efforts, in the long term, will assist in reducing stormwater pollution, improving water quality, and creating pleasant urban open spaces and waterways.

Water Quality Improvements

Wetlands can contribute to the improvement of water quality. The vegetation in both natural and constructed wetlands functions as a biological filter in removing sediments, excessive nutrients, and other water pollutants from stormwater runoff resulting in cleaner surface water and improved aquatic habitat.

Improved Flood Control

Additional flood storage capacity can be gained by protecting existing wetlands, by creating new wetlands, and by widening and returning channels to their natural meandering patterns. Design conventions, such as widened channel bottoms, allow the resulting low flow channels to meander among wetlands, re-establishing the original stream bank habitat, and reducing the downstream impacts of stormwater runoff that originates in urban areas. Other flood storage improvements such as on-site detention ponds can provide multiple benefits, for example, provision of flood control, open space, and wildlife habitat.

Improved Plant and Animal Habitat

Greater protection of wildlife habitat is a priority of Goal 5, and wetland areas provide critical wildlife habitat. By protecting and restoring a variety of wetland types, and buffering them from the impacts of nearby development, diversity of habitats can be sustained and improved.

Recreation, Education, and Research

Trails, multi-use paths, and wildlife observation areas within a diverse system of wetlands and stream corridors can provide opportunities for public enjoyment of the natural environment. Wetland environments provide excellent opportunities for education and recreation, particularly if utilized by elementary and secondary schools. The completion of the Bear Creek Greenway from Ashland to Central Point and beyond is progressing, and encompasses many habitat types along Bear Creek, including wetlands. The Greenway is already used for educational purposes, combining classroom learning with field experience in environmental programs, such as those where students

adopt creek sections, plant trees, and release salmon fry. The Bear Creek Watershed Education Partners, a committee of the Bear Creek Watershed Council, is currently overseeing such programs.

Corridors and Connections

By providing greenways and open space along existing waterways and wetlands, a connected system could be established throughout the UGB, and ultimately linking communities in the Bear Creek Valley. Greenways provide corridors for wildlife movement and species interchange, as well as connections for human use. One example is the riparian corridor and proposed multi-use path along Larson Creek, which would connect the Southeast area with the Bear Creek Greenway.

WETLAND PROTECTION ORDINANCE

As noted above, to comply with Goal 5 requirements for wetland protection, specific regulations must be adopted in the Medford Municipal Code ~~*Land Development Code*~~. Medford's proposed ~~W~~wetland ~~P~~protection ~~ordinances~~ regulations would address locally significant wetlands and other identified wetlands that are not locally significant. ~~could address other wetlands.~~ ~~.~~ In the case of some wetlands, a "safe harbor ~~ordinance~~ regulation" may be adopted, which ~~forbids~~ prohibits disturbance of the wetland, but does not include buffer areas. In other cases, after the ESEE (Energy, Social, Environmental, and Energy) analysis is completed, regulations ~~ordinances~~ that address allowing, prohibiting, or limiting ~~permitting, limiting, or allowing~~ conflicting uses would be adopted. These may include required buffers. When reviewing ~~development~~ permits or ~~plan authorization~~ land use applications for properties containing a wetland ~~Wetland Protection Area~~, the approving authority would consider how well the proposal satisfies the objectives of the ~~ordinance~~ regulations. The objectives of Medford's proposed ~~W~~wetland ~~P~~protection ~~Ordinance~~ regulations include:

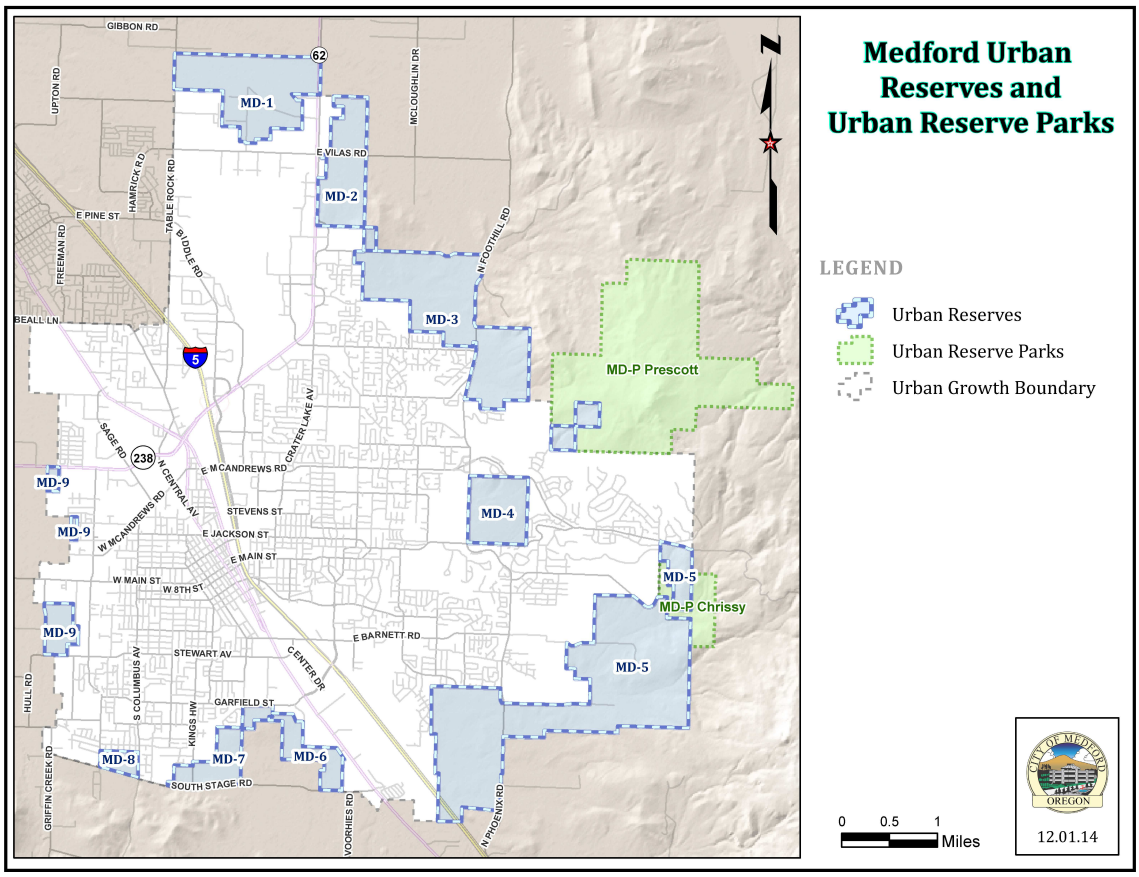
- To implement the goals and policies of the "Environmental Element" of the Medford *Comprehensive Plan* and achieve their purposes.
- To protect and restore Medford's wetland areas, thereby protecting and restoring the hydrologic, ecologic, and land conservation functions these areas provide for the community.
- To protect fish and wildlife habitat, enhance water quality, control erosion and sedimentation, preserve native vegetation, and reduce the effects of flooding.
- To protect and restore the natural beauty and distinctive character of Medford's wetlands as community assets.
- To enhance the value of properties near wetlands by utilizing the wetland as a visual amenity.
- To enhance coordination among local, state, and federal agencies regarding development activities near wetlands.
- To implement state and federal law with respect to protecting Medford's significant wetlands and the protection of clean water, pollution and flooding control, and preservation of endangered species.

- To improve public awareness and appreciation of wetlands for their unique ecosystem functions and the visual and environmental benefits they provide.

URBAN RESERVE LOCAL WETLAND INVENTORY (2016)

In 2015, the City of Medford hired SWCA Environmental Consultants to conduct a Local Wetland Inventory (LWI) for the areas in the City's Urban Reserve (UR). This inventory was started to follow the external study area portion of the Urban Growth Boundary project and address Goal 5 requirements related to wetlands. The entire UR was studied to cover all possible areas considered for inclusion in the UGB. Each of the 11 UR areas is labeled with a "MD" number starting at 1 through 9 (See Figure 16). The study area encompassed roughly 6,400 acres including Prescott and Chrissy Parks within four identified drainage basins.

Figure 16: Study Area - Medford Urban Reserves and Urban Reserve Parks



The consultants followed the approach outlined in the Oregon Administrative Rules (OAR) using a combination of on-site and off-site inventory methods to identify the resources. Wetlands were evaluated using the *Oregon Freshwater Wetland Assessment Methodology (OFWAM)* and grouped into units. These results were in turn used to identify Locally Significant Wetlands (LSW) within the study area. The report identifies 82 wetlands (58 identified as locally significant) totaling 185 acres (not including rivers, streams, or artificially created waters). The list and maps of the 58

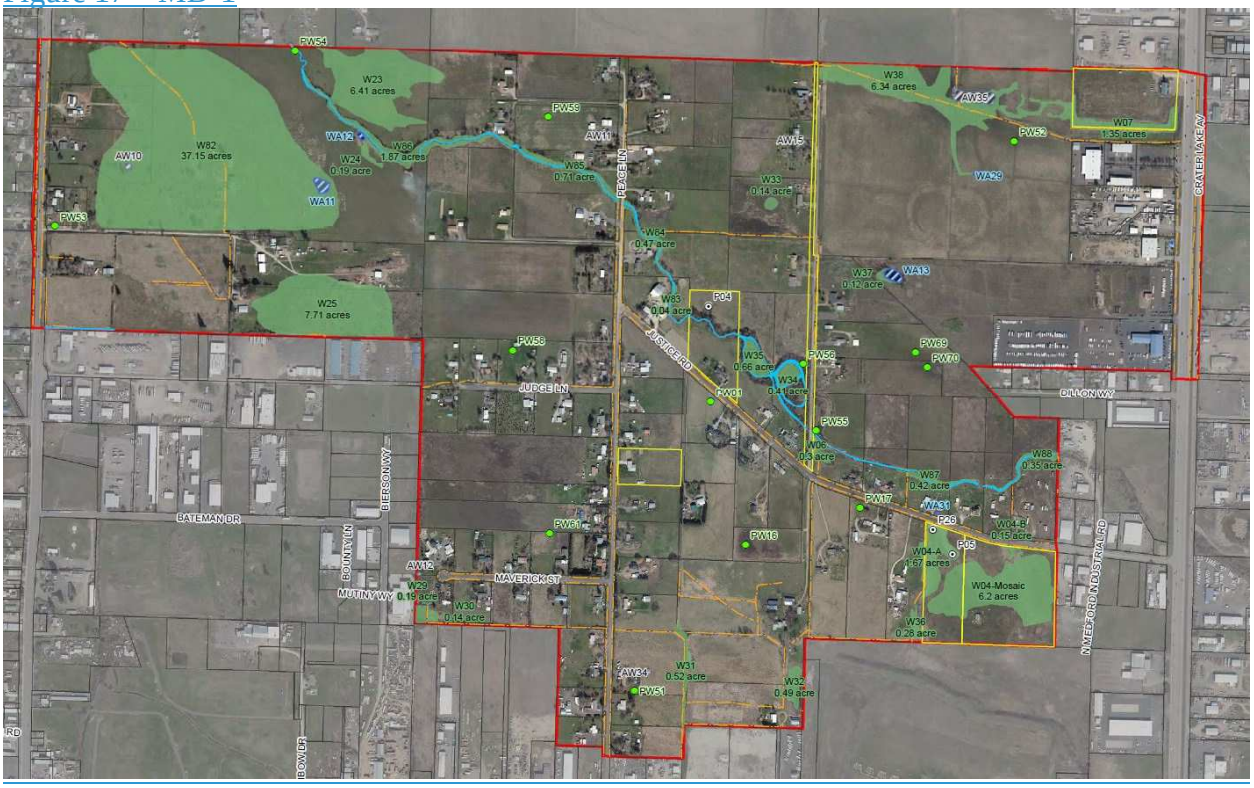
Locally Significant Wetlands are provided below for each applicable MD area. The remaining wetlands identified are dispersed throughout the MD locations. All wetlands are subject to review by the applicable state and federal agencies.

MD-1

	OFWAM Grouping*	Unique Identifier	Size (acres)	DSL File Number
1.	MWC-1	W04-A	1.67	None
2.	MWC-1	W04-B	0.15	None
3.	MWC-1	W04-Mosaic	6.20	None
4.	MWC-2	W06	0.30	WD2012-0181
5.	MWC-3	W07	1.35	WD2005-0692
6.	MWC-2	W23	6.41	None
7.	MWC-2	W24	0.19	None
8.	MWC-8	W25	7.71	None
9.	MWC-2	W34	0.41	None
10.	MWC-2	W35	0.66	None
11.	MWC-1	W36	0.28	None
12.	MWC-3	W38	5.90	WD-2012-0181
13.	MWC-7	W82	37.15	None
14.	MWC-2	W83	0.04	None
15.	MWC-2	W84	0.47	None
16.	MWC-2	W85	0.71	None
17.	MWC-2	W86	1.87	None
18.	MWC-2	W87	0.42	WD2002-0010
19.	MWC-2	W88	0.35	None

*OFWAM assessment code: MWC = Midway Creek Drainage

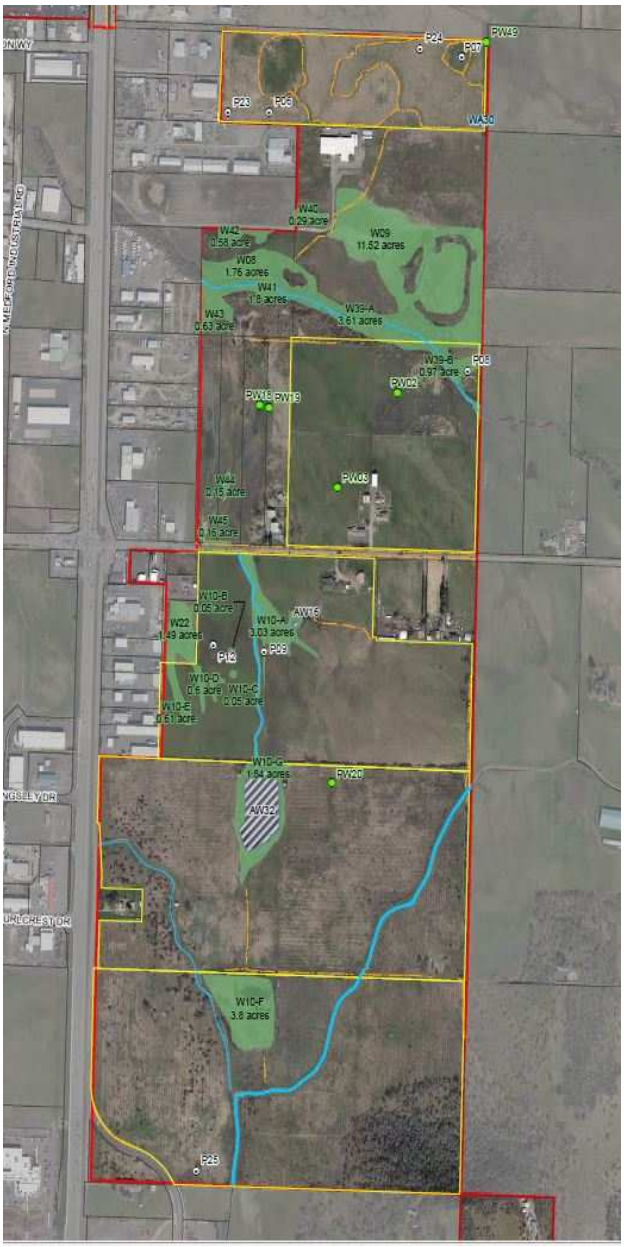
Figure 17 – MD-1



MD-2

	OFWAM Grouping	Unique Identifier	Size (acres)	DSL File Number
1.	MWC-4	W08	1.76	None
2.	MWC-4	W09	11.52	WD2009-0470
3.	MWC-5	W10-A	3.06	WD2007-0106
4.	MWC-5	W10-D	0.60	WD2007-0106
5.	MWC-5	W10-E	0.61	WD2007-0106
6.	MWC-5	W10-F	3.80	WD2007-0106
7.	MWC-5	W10-G	1.84	WD2007-0106
8.	MWC-5	W22	1.49	None
9.	MWC-4	W39-A	3.61	WD2009-0470
10.	MWC-4	W39-B	0.97	None
11.	MWC-4	W40	0.29	WD2009-0470
12.	MWC-4	W41	1.80	None
13.	MWC-4	W42	0.58	None
14.	MWC-4	W43	0.63	None

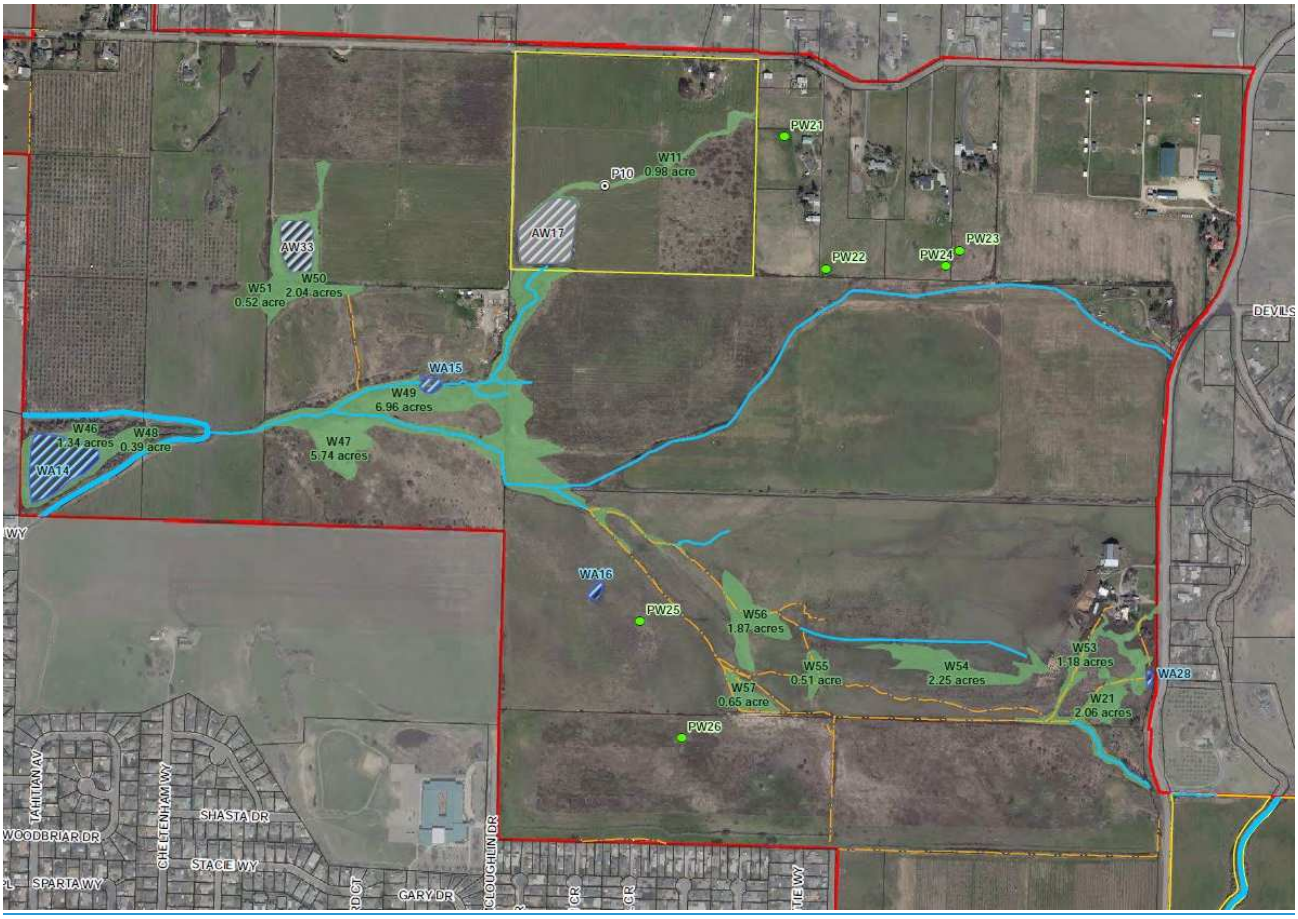
Figure 18 – MD-2



MD-3

	OFWAM Grouping	Unique Identifier	Size (acres)
1.	MWC-6	W11	0.98
2.	MWC-6	W21	2.06
3.	MWC-6	W46	1.34
4.	MWC-6	W47	5.74
5.	MWC-6	W48	0.39
6.	MWC-6	W49	6.96
7.	MWC-6	W50	2.04
8.	MWC-6	W51	0.52
9.	MWC-6	W53	1.18
10.	MWC-6	W54	2.25
11.	MWC-6	W55	0.51
12.	MWC-6	W56	1.87
13.	MWC-6	W57	0.65

Figure 19 - MD-3



MD-5

	OFWAM Grouping*	Unique Identifier	Size (acres)
1.	BCS-2	W13	0.96
2.	LSC-1	W14	0.59
3.	LSC-2	W15	2.05
4.	BCS-5	W18	0.96
5.	BCS-2	W66	0.79
6.	BCS-4	W70	2.32
7.	BCS-4	W71	2.51
8.	BCS-4	W72	2.28
9.	BCS-4	W74	5.83
10.	BCS-5	W79	2.82

*OFWAM assessment codes: BCS= Bear Creek South Drainage, LSC = Larson Creek Drainage

Figure 20 – MD-5


PW08
AW39
PW39
PW48
AW27
WA25
W74
5.83 acres
W73
0.35 acre
WA23
WA24
W72
2.28 acres
PW40
WA21
WA22
W71
2.51 acres
W70
2.32 acres
WA08
PW67
W79
2.82 acre
P17
PW60
W18
0.96 acre
INTERSTATE 5

MD-6

	OFWAM Grouping	Unique Identifier	Size (acres)
1.	BCS-7	W19-A	6.75
2.	BCS-7	W19-B	0.49

Figure 21 – MD-6

WETLAND REGULATIONS

The Urban Reserve was established by adoption of the Regional Plan in 2012. The City approved an Urban Growth Boundary expansion in 2016 and received State acknowledgement in 2018. Existing agreements with the County and other elements of the City's Comprehensive Plan identify how development will occur in these expansion areas.

Standards are needed to address how the goals of the wetland regulations above are being met. Wetlands (either significant or not) have been identified in almost all of the study areas. The City seeks to protect and manage these wetlands over time as land is annexed to the City.

As noted above, the State outlines two paths for regulating wetlands, the safe harbor and standard (ESEE analysis) approaches. The City has conducted an ESEE analysis for the locally significant wetlands identified within the 2016 inventory (See full analysis in Appendix F). A summary of the conclusions follows.

Site	MD Location	Wetland IDs	Quality Determination	Recommended Buffer/Setback Area	Goal 5 Recommendation
1	MD-6	W19-A W19-B	Moderate	50 feet	Allow but reduce impacts
2	MD-5	W18 W79	High	50 feet	Protect; Extend Riparian Corridor
3	MD-5	W70 W71 W72 W74	High	50 feet	Allow but reduce impacts
4	MD-5	W13 W66	Moderate	50 feet	Allow but reduce impacts
5	MD-5	W14 W15 W63 (not significant)	Moderate	50 feet	Allow but reduce impacts; Extend riparian corridor
6	MD-3	W11 W21 W46 W47 W48 W49 W50 W51 W53 W54 W55 W56	Moderate	50 feet	Allow but reduce impacts
7	MD-2	W10-A W10-D W10-E W10-F W10-G W22	Moderate	50 feet	Allow but reduce impacts
8	MD-2	W08 W09 W39-A W39-B W40 W41 W42 W43	High	50 feet	Allow but reduce impacts; Extend riparian corridor

9	MD-1	W82	High- Wetland of Special Interest	50 feet	Protect
10	MD-1	W25	High – Wetland of Special Interest	50 feet	Protect
11	MD-1	W06 W23 W24 W34 W35 W83 W84 W85 W86 W87 W88	High	50 feet	Allow but reduce impacts, Extend riparian corridor
12	MD-1	W07 W38	Moderate	50 feet	Allow but reduce impacts
13	MD-1	W04-A W04-B W04-mosaic W36	High; W04-Mosaic (Wetland of Special Interest)	50 feet (W04A, W04-B, W36) 50 feet (W04-Mosaic)	Allow but reduce impacts; Minimize impacts to the wetland mosaic

The adoption of the 2016 Local Wetland Inventory (LWI) and associated regulations to protect the wetlands (significant or not) are an important step in meeting State requirements as land is developed in the 2018 Urban Growth Boundary.

The 2016 Urban Reserve Local Wetlands Inventory report and appendices are adopted by reference.

The Conclusions and Goals, Policies, and Implementation Measures for the Natural Resources - Wetlands section are listed below in conjunction with those for the Water Quality and Wildlife Habitat sections.

Site-Specific Wetland ESEE Analysis for Locally Significant Wetlands identified in the 2015 Local Wetland Inventory

The following site-specific Economic, Social, Environmental, and Energy (ESEE) analysis has been conducted addressing how conflicting uses, if allowed, could adversely impact each significant wetland resource and how the wetland may impact proposed uses. The wetlands are located in both proposed Urban Growth Boundary expansion areas as well as Urban Reserves. A partnership and agreement with Jackson County on how to manage the protection or impacts of these wetlands will be very important over the long term. Information below is based on wetland summary sheets found in the 2016 Medford Urban Reserve Local Wetland Inventory report, the 2018 Urban Growth Boundary amendment comprehensive plan designations, proposed and conceptual transportation plans, the 2016 Leisure Services Plan, floodplain and riparian corridor data, and County zoning.

Locally Significant Wetlands

The 2016 Local Wetland Inventory provides information on the locally significant wetland criteria found for each wetland. Wetlands within the Medford Urban Reserves and 2018 Urban Growth Boundary are considered *significant* if, through the Oregon Freshwater Wetland Assessment Methodology (OFWAM) evaluation yes is the answer to any of the following questions:

1. Does the wetland provide diverse wildlife habitat?
2. Is the wetland's fish habitat function intact?
3. Is the wetland's water quality function intact?
4. Is the wetland's hydrologic control function intact?
5. Is the wetland less than ¼ mile from a water body listed by DEQ as a water quality limited water body (303(d) list) and is the wetland's water quality function intact, or impacted or degraded?
6. Does the wetland contain a rare plant community?
7. Is the wetland inhabited by any species listed federally as threatened or endangered, or state listed as sensitive, threatened or endangered?
8. Does the wetland have a direct surface water connection to a stream segment mapped by ODFW as habitat for indigenous anadromous salmonids and is the wetland's fish habitat function intact, or impacted or degraded?

High and Moderate Quality Wetlands

The analysis further designates a quality ranking of either High or Moderate to the locally significant wetlands. High quality wetlands are designated using a combination of key assessment variables (functions and values) used to determine wetland significance. High Quality Wetlands are locally significant wetlands that provide highly rated ecological functions and have at least one of the following characteristics:

1. Have at least two "high" OFWAM function ratings (i.e., diverse wildlife habitat, intact fish habitat, intact water quality function, or intact hydrologic control function); or
2. Contain one or more rare plant communities; or
3. Provide habitat for listed species; or
4. Connect directly to a salmon-bearing stream.

Moderate quality wetlands are categorized as those locally significant wetlands that do not meet the above criteria.

The ESEE analysis starts in reverse MD order starting in MD-6 and ending in MD-1.

Site 1: MD-6 (Bear Creek South - South Stage Road)

The Bear Creek South site contains two significant wetlands, W-19A and W-19B. These wetlands are located in MD-6 southeast, west of South Pacific Highway and north of South Stage Road. These wetlands have the following characteristics:

Wetland IDs: W19-A & W19-B
OFWAM Grouping Code: BCS-7
Watershed Boundary: Larson Creek-Bear Creek
Wetland Size: 7.24 acres
Number of Parcels Affected: 7
Combined Parcel Area: 111.78 acres
Key Assessment Variable: Hydrologic Control
Quality Determination: **Moderate**

Summary of Affected Parcels

Wetland/ Tax Lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/ Overlay	Flood-plain	Current Use(s)
W19-A						
381W05 4800	22.62	UGB	Commercial	Exclusive Farm Use	N/A	Vacant
381W05B 2000	2.55	UR	N/A	Rural Residential (RR-5)	N/A	Partially Improved
381W05 1300	2.38	UR	N/A	Rural	N/A	Vacant

				Residential (RR-5)		
381W05 2400	81.70	UGB	Heavy Industrial	Light Industrial	N/A	Improved
W19-B						
381W05 4800	22.62	UGB	Commercial	Exclusive Farm Use	N/A	Vacant
381W05B 2100	1.37	UGB	Commercial	Rural Residential (RR-5)	N/A	Improved
381W05B 2200	0.50	UGB	Commercial	Rural Residential (RR-5)	N/A	Vacant
381W05C 800	0.66	UGB	Commercial	Rural Residential (RR-5)	N/A	Improved

Distinguishing Site Characteristics
W19-A is located over a large area with varying topography. It is fed by groundwater and ditches in some portions. Both wetlands are connected to each other by a culvert under Reed Lane. Additional wetlands that are not locally significant also are present in the southeast portion of tax lot 4800 and extend into the Urban Reserve properties along Starlite Lane.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	**X**
Service Commercial	
Heavy Industrial	**X**
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

<u>Economic Consequences</u>
The proposed General Land Use Plan designations for these areas include Heavy Industrial and Commercial. Development of these properties is intended to meet future land needs that will accommodate industrial and commercial uses. Fully protecting these wetlands could have

adverse economic impacts on adequately developing these properties. Although no higher order streets are proposed in this location, the extension of local streets and utilities may be required in order to serve future development causing disturbance to the wetlands. Impacts to the wetlands shall be minimized to the extent possible.

Social Consequences
The wetlands could provide a green space or buffer between the proposed commercial and industrial developments and the existing residential properties that surround them. The wetlands could be incorporated to serve as a connection between the different types of development.

Environmental Consequences
By allowing conflicting uses fully within the wetlands would mean the loss of wetlands ranked moderate for hydrologic control. Development plans that identify ways to limit conflicts or use low impact development strategies could protect some of the wetland functions but there are inherent conflicts between the location of the wetlands and opportunities to develop the properties that will result in the loss of wetlands to some degree.

Energy Consequences
There are no energy consequences identified.

Goal 5 Recommendation
Allow but reduce, to the extent possible, impacts to the wetlands. Add 50 foot buffer to retained wetlands.

Site 2: MD-5 (Bear Creek South – South of Interstate 5)

This site contains two significant wetlands, W-18 and W-79. These wetlands are located in MD-5 southwest, south of Interstate 5. These wetlands have the following characteristics:

Wetland IDs:	W18 & W79
OFWAM Grouping Code:	BCS-5
Watershed Boundary:	Larson Creek-Bear Creek
Wetland Size:	3.78 acres
Number of Parcels Affected:	1
Combined Parcel Area:	11.62 acres
Key Assessment Variable:	Wildlife Habitat, Fish Habitat, Connects to Bear Creek
Quality Determination:	**High**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W18 & W79						
381W04 401	11.62	UGB	Parks and Schools	Exclusive Farm Use (EFU)	Yes	Vacant (Adjacent to the Bear Creek Greenway)

Distinguishing Site Characteristics

W18 is a Bear Creek Greenway wetland from ODOT Salmon Resource and Sensitive Area Mapping survey (SRSAM) in 2004. This wetland extends offsite and connects to wetland W79, a riparian wetland along the creek also. The wetlands are located on property owned by Jackson County and located north and east of the greenway trail. The City's riparian corridor along Bear Creek terminates at this tax lot and could be extended to encapsulate the identified wetlands. The property to the south is developed with the Medford Estates Mobile Home Park.

Conflicting Uses

The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	
Greenway Corridor	**X**
Vegetation removal and grading	**X**

<u>Economic Consequences</u>

Fully protecting these wetlands in this location is optimal. The site is publicly owned by Jackson County and is part of the Bear Creek Greenway network. The location provides opportunities to extend the City's riparian corridor, Parks and Schools General Land Use Plan designations and Greenway overlay to ensure public benefit and wetland protection in the long term.

Social Consequences

The site is vacant and not impacted by development. It includes a portion of the Bear Creek Greenway trail which serves regionally as a transportation and recreational corridor. Its continued use as a greenway and as a natural area are important to the livability of the citizens and visitors of Medford and surrounding communities.

Environmental Consequences

The site contains a section of Bear Creek and its associated mapped floodplain which extends to the majority of the property. The site is bordered by Interstate 5 to the east and limited emergency vehicle access from the Bear Creek Greenway trail. The location and existing site constraints limit future development beyond its use as a greenway corridor making it a likely candidate for protection of the wetlands and an extension of the riparian corridor.

Energy Consequences

Maintaining this site in its current conditions to the extent possible enhances and protects the functions of the Creek, the existing vegetation, and wetlands. It maintains flood storage capacity by retaining the natural floodplain boundaries of the creek. The vegetation provides shade and protection to wildlife within and surrounding the creek.

Goal 5 Recommendation

Protect the wetlands and extend the existing riparian corridor overlay within this parcel to encompass the wetland areas and natural functions of the creek. Add a 50 foot buffer.

Site 3: MD-5 (Bear Creek South – North of Interstate 5)

This site contains four significant wetlands, W70, W71, W72, and W74. These wetlands are located in MD-5 southwest, north of Interstate 5. These wetlands have the following characteristics:

Wetland IDs:	W70, W71, W72, & W74
OFWAM Grouping Code:	BCS-4
Watershed Boundary:	Larson Creek-Bear Creek
Wetland Size:	12.94 acres
Number of Parcels Affected:	2
Combined Parcel Area:	149.08 acres
Key Assessment Variable:	Water Quality, Hydrologic Control
Quality Determination:	**High**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W70						
381W04 400	56.76	UGB	General Industrial	Exclusive Farm Use (EFU)	N/A	Structures on site, Mostly undeveloped
381W04 501	92.32	UGB	Service Commercial	Exclusive Farm Use (EFU)	N/A	Structure on site, Mostly undeveloped
W71, W72, and W74						
381W04 400	56.76	UGB	General Industrial and Service Commercial	Exclusive Farm Use (EFU)	N/A	Structures on site, Mostly undeveloped

Distinguishing Site Characteristics

W70 is a National Wetland Inventory (NWI) mapped wetland located east of I-5 in flood irrigated pasture with extensive ditching throughout. It connects to two water bodies identified as WA08 and WA22. W71 is located on the southwest edge of a flood irrigated field which also has extensive ditching throughout. There are limited outlets due to I-5 bordering on the western edge and is connected to wetland W72. Wetland W72 is also from NWI map data and is located in a pasture and is connected to a ditch that runs along the southern edge of the parcel. It has potential for connection to waterbody WA25 to the east and has outflow to the west via a ditch. There are mapped significant wetlands from the 2002 inventory on the adjacent tax lot to the west (t.l. 300). Bear Creek Orchards hired Montero, Cafferata Consulting LLC, and Schott and Assoc. to delineate the wetlands on tax lot 501. The delineation was submitted to DSL for review and approval. The delineation was included as an attachment in the Local Wetland Inventory document. (Permit #WD2015-0492 (approved with revisions))

Conflicting Uses

The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	**X**

Heavy Industrial	
General Industrial	**X**
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences

Future transportation networks and utility extensions are proposed along the northern property line of tax lot 400 with the extension of South Stage Road from the west as well as the north-south street extension of Golf View Drive that crosses both tax lots. Adjustments to shift Golf View Drive to the east could lessen the impact to wetland W70 and should be considered as an alternative. There is potential to maintain the high quality wetlands along the I-5 edge (W71 and W72) as future street connections are not anticipated and access to the site from I-5 is unlikely. Impacts due to future street locations may affect the wetlands and shall be permitted but reduced as much as possible.

Social Consequences

The wetlands have recreational and aesthetic values providing opportunities for open space and potential walking and biking amenities that could connect to the Bear Creek Greenway and development within the residential lands to the north. Limiting conflicting uses and using the wetlands as assets to balance the social values versus the development opportunities are important.

Environmental Consequences

The wetlands are determined to be high quality so completely permitting the conflicting industrial and commercial uses would result in a loss to these wetlands and the functions of water quality and hydrologic control they provide. These wetlands were identified as unbuildable in the evaluation of the Urban Growth Boundary expansion however considerations for street and utility connections need to be evaluated to allow these uses but reduce their impact on the wetlands. A 50-foot buffer is needed around the perimeter of the wetlands retained on site.

Energy Consequences

On balance with the natural functions of the wetlands, future street connectivity between the east and west side of I-5 and north-south routes are important in creating more direct routes for vehicles and more opportunities for walking and biking.

Goal 5 Recommendation

Allow but reduce, to the extent possible, impacts to the wetlands. Impacts are likely to occur with wetlands W71 and W74. Opportunities to protect wetlands W71 and W72 are more probable. Add a 50 feet buffer to the wetlands.

Site 4: MD-5 (Larson Creek South – East of Santa Barbara Drive)

This site contains two wetlands W13 and W66 located northeast of the intersection of Coal Mine Road and Santa Barbara Drive. These wetlands have the following characteristics:

Wetland IDs:	W13 and W66
OFWAM Grouping Code:	BS-2
Watershed Boundary:	Larson Creek- Bear Creek
Wetland Size:	1.75 acres
Number of Parcels Affected:	1
Combined Parcel Area:	166.21 acres
Key Assessment Variable:	Within ¼ mile of Larson Creek
Quality Determination:	**Moderate**

Summary of Affected Parcels

Wetland/ Tax lot	**Parcel (acres)**	**UGB or UR**	**Medford GLUP Map**	**County Zoning/Overlay**	**Floodplain**	**Current use(s)**
W13 & W66						
371W35 126	166.21	UR	N/A	Exclusive Farm Use (EFU)	Not Mapped	Vacant

Distinguishing Site Characteristics

Both wetlands are located in a valley and boundaries were copied from the National Wetland Inventory (NWI) mapping data. The wetlands are connected to Larson Reservoir (AW21). The property is not proposed to be included in the 2016 Urban Growth Boundary expansion.

Conflicting Uses

The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences

The property is currently zoned Exclusive Farm use and will be under County jurisdiction well into the future. The impacts of urban development are not yet anticipated as the site will remain in the Urban Reserve and subject to County regulations. Higher order streets are planned along Santa Barbara Drive and Coal Mine Road. Wetland W66 crosses an access road to a residence to the east. The grading, graveling, or paving of this existing access road is likely to occur as necessary. The street and utility facilities could impact these wetlands in the future but protecting them until those improvements happen is possible.

Social Consequences

A fork of Larson Creek is north of the wetlands and an extension of planned pedestrian and bike paths along its bank are likely, providing educational, recreational, and aesthetic benefits by limiting conflicting uses at this site.

Environmental Consequences

There is opportunity to protect the majority of these wetlands identified. Allowing but reducing conflicting uses for these moderate quality wetlands in the location of the access road and protecting the other can conserve the wetland functions.

Energy Consequences

There are no energy consequences identified.

Goal 5 Recommendation

Allow but reduce impacts to the wetlands. It is recommended the two wetlands be protected in the long term except in the areas of the existing private access road. Transportation and utility extensions in the future may necessitate further impacts to these wetlands. Wetlands shall be protected by a 50 foot buffer to reduce impacts.

Site 5: MD-5 (Larson Creek North– South of Cherry Lane)

This site contains two wetlands W14 and W15 located southeast of Cherry Lane. These wetlands have the following characteristics:

Wetland IDs:	W14 and W15
OFWAM Grouping Code:	LSC-1 and LSC-2
Watershed Boundary:	Larson Creek – Bear Creek
Wetland Size:	2.64 acres
Number of Parcels Affected:	1
Combined Parcel Area:	163.63 acres
Key Assessment Variable:	Water Quality
Quality Determination:	**Moderate**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W14 & W15						
371W26 104	163.63	UGB and UR	Urban Residential (UR)	Exclusive Farm Use	Not mapped	Residence

Distinguishing Site Characteristics

Wetland W15 connects to Mud Creek, a spur from the North Fork of Larson Creek. WetlandW14 is separated by W15 by a road. The site is grazed and impacted by cattle. Other not locally significant wetlands (W63 and W64) are identified. W15 and W63 were determined to be connected based on the riparian corridor of Mud Creek.

Conflicting Uses

The following conflicting uses apply within this resource site and its impact area.

Urban Residential	**X**
Urban Medium Residential	
Urban High Residential	
Commercial	**X**
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences

Higher order streets are proposed to the west of the significant wetlands impacting W64 (not locally significant). The existing access road (driveway) into the property will be maintained over time or converted into street and utility access in the future potentially impacting the wetlands. Extension of the riparian corridor is proposed to include the wetlands along Mud[CGP1] Creek and the North Fork of Larson Creek (W14, W15, and W63 (not locally significant)).

Social Consequences

A pedestrian and bike path intended to connect to Chrissy Park is proposed along the North Fork of Larson Creek which provides recreational and aesthetic benefits. Limiting the conflicting uses of these wetlands will help maintain the integrity of these wetlands.

Environmental Consequences

Some impacts are likely to these wetlands due to conflicting uses with urban development (transportation, utility and recreational purposes). There are opportunities to limit these conflicts through extension of the riparian corridor protections.

Energy Consequences

Transportation benefits may be seen both for vehicular and bike/pedestrian users with the addition of new street and trail connections.

Goal 5 Recommendation

It is recommended the wetlands be protected to the extent possible by allowing but reducingg conflicting uses. The riparian corridor shall be extended to include W14, W15, and W63 and an additional 50 foot buffer added.

Site 6: MD-3 (Whetstone Creek – Rogue River)

This site contains twelve wetlands located south of Coker Butte Road and west of N. Foothill Road. These wetlands have the following characteristics:

Wetland IDs:	W11, W21, W46, W47, W48, W49, W50, W51, W53, W54, W55, W56
OFWAM Grouping Code:	MWC-6
Watershed Boundary:	Whetstone Creek – Rogue River
Wetland Size:	26.49 acres
Number of Parcels Affected:	8
Combined Parcel Area:	429.22 acres
Key Assessment Variable:	Hydrologic Control
Quality Determination:	**Moderate**

Summary of Affected Parcels

Wetland/ Tax lot	**Parcel (acres)**	**UGB or UR**	**Medford GLUP Map**	**County Zoning/Overlay**	**Floodplain**	**Current use(s)**
W11						
371W09 800	36.35	UR	N/A	Exclusive Farm Use (EFU)	Not Mapped	Residence; Farming
W21						
371W09 2600	99.35	UGB	Urban Residential, Urban High Density Residential, and	Exclusive Farm Use (EFU)	Not Mapped	Residence; plus additional structures

			Commercial			
371W09 2700	58.96	UGB	Urban residential, Urban High Density Residential	Exclusive Farm Use (EFU)	Not Mapped	Vacant
W46						
371W08 800	20.01	UGB	Urban Medium Residential & Urban High Density Residential	Exclusive Farm Use (EFU)	Not Mapped	Farming
W47						
371W08 1000	40.27	UGB	Urban High Density Residential, Service Commercial, and Commercial	Exclusive Farm Use (EFU)	Not Mapped	Vacant
371W09 2600	99.35	UGB	Urban Residential	Exclusive Farm Use (EFU)	Not Mapped	Residence; plus additional structures
371W09 900	99.54	UR	N/A	Exclusive Farm Use (EFU)	Not Mapped	Vacant
W48						
371W08 900	35.13	UGB and UR	Urban High Density Residential	Exclusive Farm Use (EFU)	Not Mapped	Vacant
W49						
371W08 900	35.13	UGB and UR	Urban High Density Residential	Exclusive Farm Use (EFU)	Not Mapped	Vacant
371W08 1000	40.27	UGB	Urban High Density Residential, Service Commercial,	Exclusive Farm Use (EFU)	Not Mapped	Vacant

			and Commercial			
371W09 800	36.35	UR	N/A	Exclusive Farm Use (EFU)	Not Mapped	Residence; Farming
371W09 900	99.54	UR	N/A	Exclusive Farm Use (EFU)	Not Mapped	Vacant
W50						
371W08 100	39.61	UR	N/A	Exclusive Farm Use	Not Mapped	Farming
371W08 1000	40.27	UGB	Urban High Density Residential, Service Commercial, and Commercial	Exclusive Farm Use (EFU)	Not Mapped	Vacant
W51						
371W08 1000	40.27	UGB	Urban High Density Residential, Service Commercial, and Commercial	Exclusive Farm Use (EFU)	Not Mapped	Vacant
371W08 100	39.61	UR	N/A	Exclusive Farm Use	Not Mapped	Farming
371W08 900	35.13	UGB and UR	Urban High Density Residential	Exclusive Farm Use (EFU)	Not Mapped	Vacant
W53, W54, W55, W56, and W57						
371W09 2600	99.35	UGB	Urban Residential, Urban High Density Residential, and Commercial	Exclusive Farm Use (EFU)	Not Mapped	Residence; plus additional structures

Distinguishing Site Characteristics
Starting on the west side of MD-3, wetland W46 is located at the headwaters of Midway Creek (Upton Slough) and Swanson Creek, on the banks of a pond located within converging arms of Hopkins Canal. This wetland connects to wetland W48. Wetlands W47 and W49 are connected and located at the headwaters of Midway Creek and Swanson Creek. Wetlands W50 and W51 are adjacent to each other and surrounded by an irrigation pond. Wetland W11 is located within a former orchard and is connected to a man-made pond (AW17). Wetlands W21, W53-W57 are located west of N. Foothill Road and interwoven among mapped ditches.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	**X**
Urban Medium Residential	**X**
Urban High Residential	**X**
Commercial	**X**
Service Commercial	**X**
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences
The property is proposed to include a mix of residential and commercial uses as well as a pattern of higher order streets. Fully protecting these wetlands as land develops would preclude orderly development of these areas over time. Protection of some of these wetlands until development occurs is achievable especially in the areas that will remain in the Urban Reserves. Allowing but reducing impacts is reasonable to balance development needs with the retention of natural resources.

Social Consequences
There are opportunities for the construction of a recreational trail within MD-3 as identified in the Leisure Services Plan (2005). A trail location adjacent to the wetlands enhances the aesthetic value of the wetland and may reduce the degradation or lose of all of it. Allowing but reducing impacts is important.

Environmental Consequences
Fully allowing impacts to these wetlands will degrade their hydrologic control function. Higher order street connections and other road improvements will affect the functions of these wetlands. Impacts could be minimized by considering realignments that avoid large portions of

the wetlands and by fully analyzing the location of the street from where its extension starts to where it ends.

Energy Consequences

A well planned street network, a mix of residential and commercial services as well as an identified trail system within this MD can have positive energy benefits on travel time and varied travel modes such as walking and biking that result in less fuel consumption.

Goal 5 Recommendation

Allow but reduce impacts to the extent possible. Include a 50 foot buffer around wetlands that are retained.

Site 7: MD-2 (Whetstone Creek – Rogue River - South of E. Vilas Road)

This site contains six wetlands located south of E. Vilas Road. These wetlands have the following characteristics:

Wetland IDs: W10-A, W10-D, W10-E, W10-F, W10-G, W22
OFWAM Grouping Code: MWC-5
Watershed Boundary: Whetstone Creek – Rogue River
Wetland Size: 11.4 acres
Number of Parcels Affected: 5
Combined Parcel Area: 210.81 acres
Key Assessment Variable: Hydrologic Control
Quality Determination: **Moderate**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W10-A, W10-D, W10-E						
371W05 300	53.34	UGB	Commercial, Service Commercial, and Urban Residential	Exclusive Farm Use (EFU)	No	Structures on site, Mostly undeveloped
371W05 313	3.99	UGB	Commercial	Exclusive Farm Use (EFU)	No	Utility station; South half undeveloped
W10-F						
371W05 900	76.45	UGB	Commercial and Urban	Exclusive Farm Use (EFU)	No	Vacant

			Residential			
W10-G						
371W05 300	53.34	UGB	Commercial, Service Commercial, and Urban Residential	Exclusive Farm Use (EFU)	No	Structures on site, Mostly undeveloped
371W05 600	77.03	UGB	Commercial, Service Commercial, and Urban Residential	Exclusive Farm Use (EFU)	No	Vacant
W22						
371W05 300	53.34	UGB	Commercial, Service Commercial, and Urban Residential	Exclusive Farm Use (EFU)	No	Structures on site, Mostly undeveloped

Distinguishing Site Characteristics
All these wetlands were identified in a 2007 wetland delineation approved by the Department of State Lands. Wetland W10-F was a former pond that no longer exists due to decommissioning of orchard and associated irrigation.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	**X**
Urban Medium Residential	
Urban High Residential	
Commercial	**X**
Service Commercial	**X**
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences

The property is proposed to include a mix of residential and commercial uses as well as a pattern of higher order streets. Fully protecting these wetlands as land develops would preclude orderly development of these areas over time. Protecting and incorporating wetlands into the commercial developments that include wetlands W10-D, W10-E, W22 are feasible as well as incorporating wetland W10-F into the residential plans. Allowing but reducing impacts to the wetlands is reasonable to balance development needs with the retention of natural resources.

Social Consequences

Fully impacting these wetlands will degrade or eliminate their hydrologic function. Limiting conflicting uses and incorporating the wetlands into the development of these properties will preserve some of their value and allow development to occur.

Environmental Consequences

Development in or near the wetlands may degrade the value and function of the wetlands. Limiting conflicting uses as much as possible could retain some of their function.

Energy Consequences

Energy benefits may be seen with future road connections and proximity of different land uses together in one area potentially reducing vehicular trips and increasing walking and biking trips.

Goal 5 Recommendation

Allow but reduce impacts to the extent possible. Include a 50 foot buffer around wetlands that are retained.

Site 8: MD-2 (Whetstone Creek – Rogue River - North of E. Vilas Road)

This site contains eight wetlands located north of E. Vilas Road. These wetlands have the following characteristics:

Wetland IDs:	W08, W09, W39-A, W39-B, W40, W41, W42, & W43
OFWAM Grouping Code:	MWC-4
Watershed Boundary:	Whetstone Creek – Rogue River
Wetland Size:	20.53 acres
Number of Parcels Affected:	3
Combined Parcel Area:	90.12 acres
Key Assessment Variable:	Wildlife Habitat, Water Quality, Hydrologic Control
Quality Determination:	**High**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W08 & W41						
361W32C 500	10.11	UR	N/A	Exclusive Farm Use (EFU)	Yes, Swanson Creek	Vacant
361W32C 100	40.33	UR	N/A	Exclusive Farm Use (EFU)	Yes, Swanson Creek	Structures in NW corner; remaining site undeveloped
W09 & W39-B						
361W32C 2400	39.68	UGB	General Industrial	Exclusive Farm Use (EFU)	Yes, Swanson Creek	Development on the southern portion of the property; remaining is undeveloped
361W32C 100	40.33	UR	N/A	Exclusive Farm Use (EFU)	Yes, Swanson Creek	Structures in NW corner; remaining site undeveloped
W39-A & W40						
361W32C 100	40.33	UR	N/A	Exclusive Farm Use (EFU)	Yes, Swanson Creek	Structures in NW corner; remaining site undeveloped
W42 & W43						
361W32C 500	10.11	UR	N/A	Exclusive Farm Use (EFU)	Yes, Swanson Creek	Vacant

Distinguishing Site Characteristics

Wetlands are adjacent to or north of Swanson Creek.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	**X**
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences
Urban development is proposed on tax lot 2400 where the wetlands are located in the northeast corner of the property. Wetlands on this property can be protected fully. The majority of the wetlands in this group are located in the Urban Reserve along Swanson Creek providing an opportunity to protect these resources until future urban development is allowed. Future higher order streets are planned within the UR areas so future creek crossings and impacts to the wetlands will be seen unless alternative alignments are proposed.

Social Consequences
Opportunities for trail connectivity along Swanson Creek is identified in the Leisure Services Plan within this MD. Impacting these wetlands will result in loss of functions as well as impacts to recreational, aesthetic, and educational benefits. Protecting these wetlands until future urban development is possible and then evaluating how to minimize impacts as development occurs will conserve the functions and values of these wetlands.

Environmental Consequences
Fully allowing conflicting uses within these sites would degrade and potentially cause the loss of wetlands that rank high for wildlife habitat, water quality, and hydrologic control. Due to the longevity of urban development occurring, limiting conflicting uses and protecting the functions of these wetlands is achievable. Future urban impacts including higher order street connectivity are issues that will need to be addressed when construction is contemplated.

Energy Consequences
Protecting the wetlands near Swanson Creek will have positive energy benefits for the existing wildlife and support the vegetation, temperature, and surrounding habitat along the creek.

Goal 5 Recommendation
Allow but reduce impacts to these wetlands. Extend the riparian corridor protections along Swanson Creek and encapsulate the adjacent wetlands. Include a 50 foot buffer along the wetlands.

Site 9: MD-1 (Whetstone Creek – Rogue River – North – Northwest corner)

This site contains one wetland located east of Table Rock Road. This wetland has the following characteristics:

Wetland IDs: W82
OFWAM Grouping Code: MWC-7
Watershed Boundary: Whetstone Creek – Rogue River
Wetland Size: 37.15 acres
Number of Parcels Affected: 4
Combined Parcel Area: 77.58 acres
Key Assessment Variable: Wildlife Habitat, Fish Habitat, Water Quality, Hydrologic Control
Quality Determination: **High – Wetland of Special Interest for Protection**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W82						
362W36A 102	63.04	UR	N/A	Open Space Reserve (OSR) and Exclusive Farm Use (EFU)	Yes, Swanson Creek	Vacant
362W36A 103	4.81	UR	N/A	Open Space Reserve (OSR)	No	Residence
362W36A 100	4.86	UR	N/A	Open Space Reserve (OSR)	No	Vacant
362W36A 104	4.87	UR	N/A	Open Space Reserve (OSR)	No	Residence

Distinguishing Site Characteristics
This wetland is a vernal pool/wetland mosaic mapped from the Agate Desert Vernal Pool Planning Technical Advisory Committee in 2000. The approximate percentage of vernal pool is unknown. The feature crosses into the 100-year floodplain of Swanson Creek. There are two small water bodies present within the mapped mosaic (AW10 – a man-made pond) and WA11 (potentially natural water).

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences
Fully protecting this wetland may be possible. The site is in the Urban Reserve and will not be impacted by urban development in the immediate future. This site has County Comprehensive Plan designations of farm and forest and zoning designations of Open Space Reserve and Exclusive Farm Use. The wetland area is not currently impacted by structures. It is unknown if the site is being farmed. Development of these properties will be processed through the County for many years so protection and/or limits on impacts will fall to them to enforce.

Social Consequences
This wetland is rated high quality and of special interest. If conflicting uses are allowed to the maximum extent, this wetland of special interest would be lost or degraded. Protecting and/or limiting the conflicts would preserve this wetland for its educational and social values.

Environmental Consequences
Protecting and limiting conflicting uses for this high quality wetland are possible. The County zoning designations in place help support protection of this wetland.

Energy Consequences
There are no energy consequences of note.

Goal 5 Recommendation
Protect this wetland and apply a 50 foot buffer to it.

Site 10: MD-1 (Whetstone Creek – Rogue River – South – Northwest corner)

This site contains one wetland located east of Table Rock Road and is south of wetland W82. This wetland has the following characteristics:

Wetland IDs: W25
OFWAM Grouping Code: WMC-8
Watershed Boundary: Whetstone Creek – Rogue River
Wetland Size: 7.71 acres
Number of Parcels Affected: 2
Combined Parcel Area: 20.2 acres
Key Assessment Variable: Hydrologic Control
Quality Determination: **Moderate – Wetland of Special Interest for Protection**

Summary of Affected Parcels

Wetland/ Tax lot	**Parcel (acres)**	**UGB or UR**	**Medford GLUP Map**	**County Zoning/Overlay**	**Floodplain**	**Current use(s)**
W25						
362W36A 600	10.2	UR	N/A	Exclusive Farm Use (EFU)	No	Structures on site
362W36A 700	10	UR	N/A	Exclusive Farm Use (EFU)	No	Structures on site; mostly vacant

Distinguishing Site Characteristics
This wetland is a vernal pool/wetland mosaic.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	
Greenway Corridor	

Vegetation removal and grading	**X**

Economic Consequences
Fully protecting this wetland is not expected to have significant economic consequences. Development on the site is along the wetland edges so impacts have already been limited. The property is in the Urban Reserve and will not develop with urban uses for many years.

Social Consequences
This wetland is rated moderate but of special interest. If conflicting uses are allowed to the maximum extent, this wetland of special interest would be lost or degraded. Protecting and/or limiting the conflicts would preserve this wetland for its educational and natural values.

Environmental Consequences
Fully allowing conflicting uses within this wetland would mean the loss of a moderate but wetland of special interest and its associated functions and values. Prohibiting or limiting conflicting uses would preserve this wetland.

Energy Consequences
There are no energy consequences of note.

Goal 5 Recommendation
Protect this wetland and apply a 50 foot buffer to it.

Site 11: MD-1 (Whetstone Creek – Rogue River – Along Swanson Creek)

This site contains eleven wetlands located north and northwest of Justice Road. This wetland has the following characteristics:

Wetland IDs:	W06, W23, W24, W34, W35, W83, W84, W85, W86, W87, W88
OFWAM Grouping Code:	WMC-2
Watershed Boundary:	Whetstone Creek – Rogue River
Wetland Size:	11.83 acres
Number of Parcels Affected:	18
Combined Parcel Area:	135.47 acres
Key Assessment Variable:	Wildlife Habitat, Fish Habitat, Water Quality, Hydrologic Control
Quality Determination:	**High**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W06						
361W31A 2800	3.04	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Vacant
361W31D 1400	1.95	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31A 800	2.75	UR	N/A	Rural Residential land (RR-5)	Yes, Swanson Creek	Jackson County owned; Highway 62 Expressway future right-of-way
W23						
361W31B 500	4.94	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
362W36A 102	63.04	UR	N/A	Open Space Reserve (OSR) and Exclusive Farm Use (EFU)	Yes, Swanson Creek	Vacant
W24						
362W36A 102	63.04	UR	N/A	Open Space Reserve (OSR) and Exclusive Farm Use (EFU)	Yes, Swanson Creek	Vacant
W34						
361W31B 2600	5.68	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
W35						
361W31B 2500	5	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
W83						
361W31B 2300	4.01	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson	Residence

					Creek	
W84						
361W31B 1700	5	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 2000	5.61	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 2300	4.01	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
W85						
361W31B 1600	4.93	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 1300	4.93	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 700	4.94	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
W86						
361W31B 1300	4.93	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 700	4.94	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 1400	4.94	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 1500	4.92	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31B 600	4.94	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
362W36A 102	63.04	UR	N/A	Open Space Reserve (OSR) and Exclusive Farm Use (EFU)	Yes, Swanson Creek	Vacant

W87						
361W31D 1200	2.98	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31D 1300	2.4	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
W88						
361W31D 1000	2.54	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence
361W31D 900	4.27	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Residence

Distinguishing Site Characteristics
These wetlands are located along Swanson Creek.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences
There are two higher order streets plus the Highway 62 Expressway project proposed to impact portions of the wetlands along Swanson Creek. The Highway 62 Expressway project has been in review for several years and is proposed for construction. The Oregon Department of Transportation (ODOT) has conducted its own environmental assessments of the impacts of this project. Planning staff has also provided the Local Wetland Inventory findings to ODOT. Portions of wetlands along the Highway 62 Expressway route will be impacted. Other north-south streets identified are likely decades away from construction but impacts may occur. Fully protecting the wetlands would prelude planned road improvements. Limiting impacts to the

wetlands in the locations of future roads minimizes the extent of damage to the wetlands. Extending the riparian corridor and encapsulating the wetlands that surround it along Swanson Creek will help protect the wetlands and provide a means to extend street and utility infrastructure in the future.

Social Consequences

The wetlands along Swanson Creek have been identified as high quality providing all four of the key assessment values regarding water quality and habitat benefits. Limiting conflicting uses to the wetlands to the extent possible, understanding impacts near the road crossings will occur, provides the best scenario for maintaining segments of the wetlands and providing the road connections.

Environmental Consequences

Allowing conflicting uses fully within the wetlands would mean the loss of high quality wetlands and their functions. Imminent impacts due to the Highway 62 Expressway project will occur to portions of the wetlands along the road corridor. Other parallel road connections are identified but would not occur for many years providing opportunities to maintain and protect those wetlands. By allowing but limiting the future street connections, the wetland functions and values could be maintained.

Energy Consequences

Understanding there are impacts to the wetlands, the Highway 62 Expressway project could have positive energy consequences as the project is anticipated to reduce congestion and collisions along the commercial corridor of Highway 62.

Goal 5 Recommendation

Allow but reduce conflicting uses related to the planned road projects. Extend the riparian corridor along Swanson Creek to incorporate the wetlands. Add a 50 foot buffer to the wetlands that remain.

Site 12: MD-1 Northeast (Whetstone Creek – Rogue River)

This site contains two wetlands located west of Crater Lake Highway. These wetlands have the following characteristics:

Wetland IDs:	W07 & W38
OFWAM Grouping Code:	MWC-3
Watershed Boundary:	Whetstone Creek- Rogue River
Wetland Size:	7.25 acres
Number of Parcels Affected:	2
Combined Parcel Area:	62.19 acres
Key Assessment Variable:	Water Quality
Quality Determination:	**Moderate**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W07						
361W31A 200	55.47	UR	N/A	Exclusive Farm Use (EFU)	No	Vacant
361W31A 100	6.72	UR	N/A	Light Industrial	No	Structure on site
W38						
361W31A 200	55.47	UR	N/A	Exclusive Farm Use (EFU)	No	Vacant

Distinguishing Site Characteristics

These wetlands were delineated separately in 2005 and 2012 respectively. The mapped area incorporates the DSL wetland delineation data with the City of Medford data.

Conflicting Uses

The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**
County Light Industrial	**X**

Economic Consequences

Fully protecting these wetlands would preclude planned street improvements such as the Highway 62 Expressway project underway, future street connections as MD-1 is urbanized, and potentially County industrial uses on tax lot 100. The western extent of W38 will be impacted by the Highway 62 Expressway project. Future street connections may impact segments of wetland W38 along its eastern extensions. Wetland W07 may also be impacted as MD-1 urbanizes due to street connections to Highway 62 and the build out of industrial uses on the site.

Interim protection of W38 (except for areas near the Expressway project) and W07 are possible by limiting conflicting uses until urbanization occurs.

Social Consequences
These wetlands are rated moderate based on their water quality values. By limiting the conflicting uses (street connections) until future urbanization occurs will help to retain their values over time. Industrial uses on tax lot 100 are still possible as the wetlands are found along the southern property line also providing an opportunity for protection.

Environmental Consequences
Fully allowing conflicting uses within the wetlands would mean the loss of a moderate quality wetland. Allowing but reducing impacts would help to conserve these wetlands to the extent possible recognizing urban development is in the distant future and development of the industrial lot can still be accomplished with little to no impacts.

Energy Consequences
As noted in Site 10, energy benefits are likely to be achieved with the Highway 62 Expressway project. Other street connections in the distant future are also likely to see benefits through reduced travel times and new alternate routes.

Goal 5 Recommendation
Allow but reduce conflicting uses. Minimize impacts to the majority of wetlands W38 and W07 until future urbanization occurs. Add a 50 foot buffer to the wetlands.

Site 13: MD-1 Southeast (Whetstone Creek – Rogue River)

This site contains four wetlands located south of Justice Road. These wetlands have the following characteristics:

Wetland IDs:	W04-A, W04-B, W04-Mosaic, W36
OFWAM Grouping Code:	MWC-1
Watershed Boundary:	Whetstone Creek – Rogue River
Wetland Size:	8.3 acres
Number of Parcels Affected:	3
Combined Parcel Area:	20 acres
Key Assessment Variable:	Hydrologic Control
Quality Determination:	**Moderate except W04-Mosaic is noted as a wetland of special interest for protection (rare/unique)**

Summary of Affected Parcels

Wetland/ Tax lot	Parcel (acres)	UGB or UR	Medford GLUP Map	County Zoning/Overlay	Floodplain	Current use(s)
W04-A						
361W31D 1700	5	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Structures on site
361W31D 1800	5.01	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Vacant
W04-B						
361W31D 1900	9.99	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Vacant
W04-Mosaic						
361W31D 1800	5.01	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Vacant
361W31D 1900	9.99	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Vacant
W36						
361W31D 1800	5.01	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Vacant
361W31D 1700	5	UR	N/A	Rural Residential Land (RR-5)	Yes, Swanson Creek	Structures on site

Distinguishing Site Characteristics

Wetland W04-A connects to Wetland W04-B by a ditch line, and is likely connected hydrologically to W04-mosaic. Wetland W04-B is depresssional and fed by ditch inflow and distinct from the mosaic complex. Wetland W04-mosaic appears to be a vernal pool/wetland mosaic. The northeast corner of the feature has been graded and has a selection of flowering vernal pool herbs.

Conflicting Uses
The following conflicting uses apply within this resource site and its impact area.

Urban Residential	
Urban Medium Residential	
Urban High Residential	
Commercial	
Service Commercial	
Heavy Industrial	
General Industrial	
Parks and Schools	
Public Facilities	**X**
Greenway Corridor	
Vegetation removal and grading	**X**

Economic Consequences
Fully protecting these wetlands may preclude an identified higher order street proposed to connect Justice Road to E. Vilas Road through MD-1 in the future. Review of alternative routes that minimize the impact to the rare wetland need to be considered. Future urban uses may result in industrial zoning further impacting the wetlands. Allowing but reducing the impacts to these wetlands to the extent possible will help ensure future street connectivity and urban uses.

Social Consequences
The wetlands are rated as moderate and one is rated as rare of special interest. The Leisure Services Plan (2005) identifies a trail network bisecting the properties providing recreational and educational opportunities. A future, higher order north-south street is proposed to cross the rare wetland. By considering alternate routes, the rare wetland could see reduced impacts that will help preserve a larger portion of it into the future.

Environmental Consequences
Fully allowing the conflicting uses would impact a rare wetland of special interest identified on the properties and degrade or lose its significance. Future urban industrial uses on the properties also will cause impacts that would result in loss of the wetlands. Shifting the future street connection around the perimeter of the rare wetland could protect it. This action however may result in additional impacts to Wetlands W04-A and W-04B just west of the rare wetland (W04-mosaic). Interim protection of these wetlands until urban development occurs is possible.

Energy Consequences
There are no energy consequences of note.

Goal 5 Recommendation
Allow but reduce impacts to the wetlands. Identify alternate routes for street connection to avoid the rare wetland and limit its impact. Add a 50 foot buffer around the wetlands (W04-A, W04-B, W36). Add a 50 foot buffer around wetland W04-mosaic.

Summary of Analysis

Site	MD Location	Wetland IDs	Quality Determination	Recommended Buffer/Setback Area	Goal 5 Recommendation
1	MD-6	W19-A W19-B	Moderate	50 feet	Allow but reduce impacts
2	MD-5	W18 W79	High	50 feet	Protect; Extend Riparian Corridor
3	MD-5	W70 W71 W72 W74	High	50 feet	Allow but reduce impacts
4	MD-5	W13 W66	Moderate	50 feet	Allow but reduce impacts
5	MD-5	W14 W15 W63 (not significant)	Moderate	50 feet	Allow but reduce impacts; Extend riparian corridor
6	MD-3	W11 W21 W46 W47 W48 W49 W50 W51 W53 W54 W55 W56	Moderate	50 feet	Allow but reduce impacts
7	MD-2	W10-A W10-D W10-E W10-F W10-G W22	Moderate	50 feet	Allow but reduce impacts

8	MD-2	W08 W09 W39-A W39-B W40 W41 W42 W43	High	50 feet	Allow but reduce impacts; Extend riparian corridor
9	MD-1	W82	High- Wetland of Special Interest	50 feet	Protect
10	MD-1	W25	High – Wetland of Special Interest	50 feet	Protect
11	MD-1	W06 W23 W24 W34 W35 W83 W84 W85 W86 W87 W88	High	50 feet	Allow but reduce impacts, Extend riparian corridor
12	MD-1	W07 W38	Moderate	50 feet	Allow but reduce impacts
13	MD-1	W04-A W04-B W04-mosaic W36	High; W04-Mosaic (Wetland of Special Interest)	50 feet (W04A, W04-B, W36) 50 feet (W04-Mosaic)	Allow but reduce impacts; Minimize impacts to the wetland mosaic